

XR-U550/U550RDS/U551RDS XR-U660/U660RDS/U661RDS

SERVICE MANUAL

US Model
Canadian Model
XR-U550

AEP Model
XR-U550RDS/U551RDS
XR-U660RDS/U661RDS

UK Model
XR-U551RDS/U661RDS

E Model
XR-U550/U660



Photo: XR-U660RDS

Model Name Using Similar Mechanism	XR-7130/7140/7142/7600
Tape Transport Mechanism Type	MG-55N-31/55N2-31

SPECIFICATIONS

Cassette player section

Tape track 4-track 2-channel stereo
Frequency response XR-U550/U550RDS/U551RDS
30 – 18,000 Hz
XR-U660/U660RDS/U661RDS
30 – 20,000 Hz

Signal-to-noise ratio

Cassette type	Dolby B	Dolby C	Dolby NR off
TYPE II, IV	66 dB	76 dB	58 dB
TYPE I	63 dB	73 dB	55 dB

Wow and flutter 0.09% (WRMS)

Tuner section

FM

Tuning range XR-U550
87.9 – 107.9 MHz
XR-U550RDS/U551RDS/U660/U660RDS/U661RDS
87.5 – 108.0 MHz

Antenna terminal External antenna connector

Intermediate frequency

10.7 MHz
Usable sensitivity 12 dBf (75 ohms)
Selectivity 75 dB at 400 kHz
Signal-to-noise ratio 65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz

0.5% (stereo), 0.3% (mono)
Separation 35 dB at 1 kHz
Frequency response 30 – 15,000 Hz
Capture ratio 2 dB

AM (MW/LW)

Tuning range

XR-U550
530 – 1,710 kHz
XR-U550; E/U660
530 – 1,620 kHz (at 10 kHz step)
XR-U550; E/U550RDS/U660/U660RDS
531 – 1,602 kHz
AM tuning interval
9 kHz/10 kHz switchable
(except the model for
European countries)
XR-U551RDS/U661RDS
MW: 531 – 1,602 kHz
LW: 153 – 281 kHz

— Continued on next page —

FM/AM CASSETTE CAR STEREO
XR-U550/U550RDS/U660/U660RDS

FM/MW/LW CASSETTE CAR STEREO
XR-U551RDS/U661RDS

SONY®



Antenna terminal External antenna connector
 Intermediate frequency 450 kHz
 Sensitivity XR-U550/U550RDS/U660/U660RDS
 30 μ V
 XR-U551RDS/U661RDS
 MW: 30 μ V
 LW: 50 μ V

Power amplifier section

Outputs Speaker outputs
 (sure seal connectors)
 Speaker impedance 3.2 – 8 ohms
 Maximum power output 20 W $\times$ 4 (at 4 ohms)*
 * Measured at 14.4 V

General

Output lead Power antenna relay control lead
 Power amplifier control lead
 Tone controls Bass $\pm$ 10 dB at 100 Hz
 Treble $\pm$ 10 dB at 10 kHz
 Loudness + 10 dB at 100 Hz
 + 6 dB at 10 kHz
 Power requirements 12 V DC car battery
 (negative ground)
 Dimensions Approx. 186 $\times$ 57 $\times$ 174 mm
 (w/h/d),
 not incl. projecting parts and controls
 Mounting dimensions Approx. 182 $\times$ 53 $\times$ 154 mm
 (w/h/d),
 not incl. projecting parts and controls
 Weight Approx. 1.3 kg
 Accessories supplied Mounting hardware (1 set)
 Power connecting cord (1)
 Front panel case (1)

Optional accessory

Remote commander RM-X30 (except the model for
 XR-U550RDS/U551RDS)

Design and specifications subject to change without notice.

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This section is extracted from XR-U660RDS/
U661RDS instruction manual.

SECTION 1 GENERAL

Installation

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.
- Before installing the unit, detach the front panel.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

Installation

Précautions

- Choisir soigneusement l'emplacement du montage, de manière que l'appareil ne gêne nullement les mouvements du conducteur.
- Éviter d'installer l'appareil là où il serait soumis à des températures élevées, comme en plein soleil ou à proximité d'une bouche d'air chaud, et où il serait soumis à de la poussière, saleté ou vibrations violentes.
- Pour garantir un montage sûr, n'utiliser que le matériel fourni.
- Avant d'installer l'appareil, déposer le panneau avant.

Réglage de l'angle de montage
Ajuster l'inclinaison à un angle inférieur à 20°.

Installation

Vorsichtsmaßnahmen

- Wählen Sie den Einbauport sorgfältig so aus, daß das Gerät die Bedienung des Fahrzeugs nicht behindert.
- Achten Sie darauf, daß das Gerät keiner Wärmeinstrahlung (Sonnenlicht, Wärmeluft von Heizung), keinem Staub, keinem Schmutz und keinen starken Vibrationen ausgesetzt ist.
- Für eine sichere Befestigung verwenden Sie stets nur die mitgelieferten Montageteile.
- Nehmen Sie die Frontplatte vor dem Einbau der Einheit ab.

Hinweis zum Montagewinkel
Das Gerät sollte in einem Winkel von weniger als 20° montiert werden.

Installazione

Precauzioni

- Scegliere con attenzione il luogo di montaggio in modo che l'apparecchio non interferisca con le normali operazioni di guida del conducente.
- Evitare di installare l'apparecchio dove sia soggetto ad alte temperature, come da esposizione alla luce solare diretta o al getto di aria calda dell'impianto di riscaldamento, o dove possa essere soggetto a polvere, sporco e vibrazioni eccessive.
- Usare solo il materiale di montaggio in dotazione per un'installazione stabile e sicura.
- Prima di installare l'apparecchio, staccare il pannello anteriore.

Regolazione dell'angolo di montaggio
Regolare l'angolo di montaggio in modo che sia inferiore a 20°.

Montage

Voorzorgsmaatregelen

- Kies de plaats voor inbouw zorgvuldig en houd er rekening mee dat het apparaat de bestuurder van de auto vooral niet in de weg mag zitten.
- Monteer het apparaat niet op plaatsen waar het blootgesteld wordt aan hoge temperaturen zoals van direct zonlicht of de warme luchtstroom van de auto-verwarming. Zorg dat het niet blootstaat aan sterke trillingen of in contact komt met veel stof of vuil.
- Gebruik voor het veilig en stevig monteren van het apparaat uitsluitend de bijgeleverde montage-onderdelen.
- Voor het installeren van het apparaat dient u eerst het voorpaneel hiervan te verwijderen.

Inbouwhoek
Monteer het apparaat in een stand die niet meer dan 20° afwijkt van het horizontale vlak.

How to Detach and Attach the Front Panel

To detach
Press the RELEASE button to open up the front panel, then pull it out.

To attach
Align the part (A) and (B), and push the front panel until it clicks.

Dépose et fixation du panneau avant

Dépose
Appuyer sur la touche RELEASE pour ouvrir le panneau avant, puis le retirer.

Fixation
Aligner les points (A) et (B), puis pousser sur le panneau pour le fixer.

Zum Anbringen und Abnehmen der Frontplatte

Zum Abnehmen
Drücken Sie die RELEASE-Taste zum Öffnen der Frontplatte und ziehen Sie sie ab.

Zum Anbringen
Richten Sie Teil (A) auf Teil (B) aus und drücken Sie die Frontplatte fest, so daß sie mit einem Klicken einrastet.

Come staccare e attaccare il pannello anteriore

Per staccare
Premere il tasto RELEASE per aprire il pannello anteriore e quindi tirarlo verso l'esterno.

Per attaccare
Allineare le parti (A) e (B) e spingere il pannello anteriore fino ad udire uno scatto.

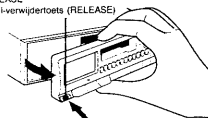
Verwijderen en weer aanbrengen van het voorpaneel

Losmaken
Druk op de voorpaneel-verwijdertoets (RELEASE) zodat het paneel naar voren springt en trek het vervolgens los.

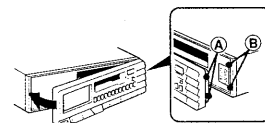
Aanbrengen
Houd de onderdelen (A) en (B) recht tegenover elkaar, en druk het paneel tegen het apparaat tot het op zijn plaats vastklikt.

To detach
Dépose
Zum Abnehmen
Per staccare
Losmaken

RELEASE button
Touche RELEASE
RELEASE-Taste
Tasto RELEASE
Voorpaneel-verwijdertoets (RELEASE)



To attach
Fixation
Zum Anbringen
Per attaccare
Aanbrengen



Mounting Example

Installation in the dashboard

Exemple de montage

Encastrement dans le tableau de bord

Einbaubeispiel

Installation im Armaturenbrett

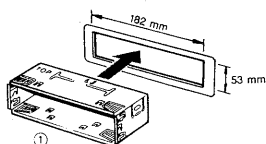
Esempio di montaggio

Installazione nel cruscotto

Montagevoorbeeld

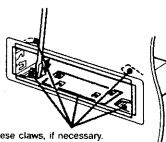
Inbouw in het dashboard

1



with the TOP marking up
avec le repère "TOP" tourné vers le haut
Mit der TOP-Markierung nach obenweisend
con l'indicazione "TOP" rivolta verso l'alto
met de aanduiding "TOP" naar boven

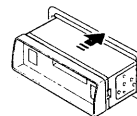
2



Bend these claws, if necessary.
Si nécessaire, plier ces griffes.
Falls erforderlich, die Klauen hochbiegen.
Piegare questi morsetti, se necessario.
Indien nodig kunt u deze lipjes ombuigen.

3

XR-U660RDS/
XR-U661RDS



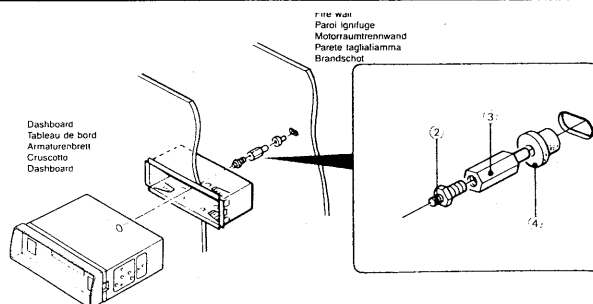
To Support the Unit

Pour installer l'appareil

Installation der Einheit

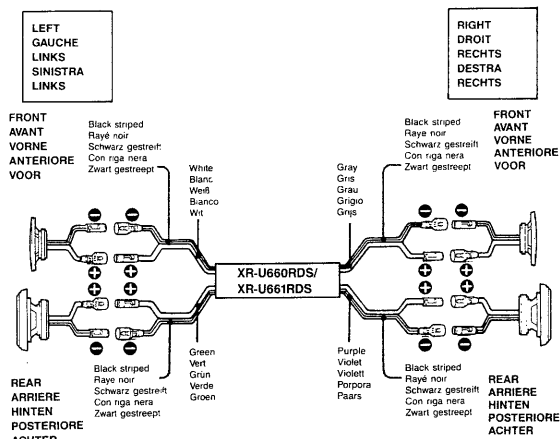
Per sorreggere l'apparecchio

Vastzetten van het apparaat



Speaker Connection Connexion des haut-parleurs Lautsprecheranschluß Collegamento dei diffusori Aansluiten van de luidsprekers

4-Speaker connection
Connexion de 4 haut-parleurs
Anschluß von vier Lautsprechern
Collegamento di 4 diffusori
Aansluiten van vier luidsprekers



Notes on speaker connection

- Use speakers with an impedance of 3.2 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.

Remarques sur les connexions des haut-parleurs

- Utiliser des haut-parleurs d'une impédance de 3,2 à 8 ohms et d'une capacité de puissance suffisante, sinon les haut-parleurs risquent d'être endommagés.
- Ne pas raccorder les bornes des haut-parleurs au châssis du véhicule et ne pas raccorder les bornes du haut-parleur droit à celles du haut-parleur gauche.

Hinweise zum Lautsprecheranschluß

- Verwenden Sie Lautsprecher mit einer Impedanz von 3,2 bis 8 Ohm und mit ausreichender Belastbarkeit. Lautsprecher mit anderen Daten können beschädigt werden.
- Verbinden Sie die Anschlüsse der Lautsprecher nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.

Note sul collegamento dei diffusori

- Usare diffusori con impedenza da 3,2 a 8 ohm e con adeguata capacità di potenza. Altrimenti i diffusori si possono danneggiare.
- Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro con quelli del diffusore sinistro.

Opmerkingen betreffende het aansluiten van de luidsprekers

- Gebruik luidsprekers met een impedantie van 3,2 tot 8 Ohm en let op dat ze het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.
- Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.

Features

General

- Full-logic feather touch system for easy and smooth operation.
- Switchable two color illumination (amber and green). (page 9)
- Provided with a digital 12-hour clock. (page 13)
- Telephone-mute function for decreasing the volume automatically with a telephone call.
- Detachable-front panel enables you to take the front panel away with you when you leave your car. (page 12)
- Caution alarm will be activated if you turn off the ignition key without removing the front panel from the unit.
- Built-in power amplifier (max. output: 4ch x 20 W) enables you to enjoy a 4-speaker system.

Tuner section

- SSIR (Sony Super Interference Rejection) PLL synthesizer tuner.
- Provided with a FM diversity reception system for a better radio reception.
- Up to 30 stations can be preset, 20 stations on FM, 10 stations on AM (XR-U660RDS). (page 25)
- Up to 40 stations can be preset, 20 stations on FM, 10 stations each on MW and LW (XR-U661RDS). (page 25)
- BTM (Best Tuning Memory) function automatically selects and stores the stations with strong signals on the preset number buttons in order of frequency. (page 23)
- The information services of FM RDS stations can be received. (page 27)

Cassette deck section

- Super-laminated head for clear treble sound.
- Auto-reverse function for listening to both sides of a cassette continuously.
- Dolby B and C NR* system reduces tape hiss noises during the tape playback. (page 16)
- AMS (Automatic Music Sensor) for automatically locating the beginning of a selection during tape playback. (page 17)
- Intro scan function for playing the first 10 seconds of each track. (page 18)
- Repeat play function for listening to a currently playing track repeatedly. (page 18)
- Blank skip function for automatically skipping blank spaces during the tape playback. (page 19)
- ATA (Automatic Tuner Activation) for automatically turning on the tuner during the fast-forwarding or rewinding of a tape. (page 19)

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol [D] are trademarks of Dolby Laboratories Licensing Corporation.

CD changer control section

(when the optional Sony CD changers are connected)

- Several CD changers can be connected and controlled by the use of the Sony source selector (not supplied) with the unit.
- Direct disc selection for selecting discs directly with the numerical buttons. (page 36)
- Intro scan function for playing the first 10 seconds of each track of every disc. (page 41)
- Repeat play function for playing a track, a disc or a changer repeatedly. (page 40)
- Shuffle play function for playing tracks in random order. (page 39)
- Manual search function for locating a desired point in a track. (page 38)
- Custom file function for displaying the title of each disc and setting a PLAY/SKIP mode on each track. (page 42)

Supplied Mounting Hardware Matériel de montage fourni Mittelgelieferte Montageteile Materiale di montaggio in dotazione Bijgeleverde montage-onderdelen

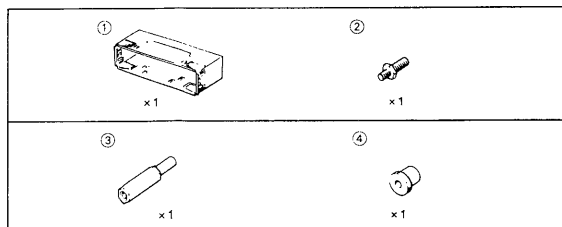
The numbers in the list are keyed to those in the instructions.

Les numéros de la liste correspondent à ceux mentionnés dans les procédures.

In der folgenden Liste und im Erläuterungstext werden dieselben Nummern zur Kennzeichnung der Teile verwendet.

I numeri nella lista corrispondono a quelli riportati nelle istruzioni.

De nummers in de afbeelding verwijzen naar die in de montage-aanwijzingen



Connections

Connexions

Anschluß

Collegamenti

Aansluitingen

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the red power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal which is energized when the ignition key is set to the accessory position.
- Run all ground wires to a common ground point.

Précautions

- Cet appareil est conçu pour fonctionner exclusivement sur courant continu de 12 volts avec masse négative.
- Avant de procéder aux connexions, débrancher la borne de mise à la masse de la batterie du véhicule, pour éviter tout court-circuit.
- Brancher le fil d'entrée d'alimentation rouge uniquement après que tous les autres fils ont été connectés. En outre, veiller à le raccorder à la borne d'alimentation positive de 12 V qui est énergisée quand la clé de contact est commutée sur la position accessoire.
- Rassembler tous les fils de mise à la masse en un point de masse commun.

Vorsicht

- Dieses Gerät ist ausschließlich für eine negativ geerdete 12-V-Autobatterie bestimmt.
- Trennen Sie vor dem Anschließen des Geräts die Erdungsklemme der Batterie ab, um einen Kurzschluß zu vermeiden.
- Schließen Sie die rote Stromversorgungsleitung als letztes, nachdem alle anderen Anschlüsse hergestellt sind, an einen positiven 12-V-Kontakt des Bordnetzes an, der in der Zübehörposition des Zündschlosses unter Strom steht.
- Leiten Sie alle Erdungskabel an einen gemeinsamen Massepunkt.

Attenzione

- Questo apparecchio è stato progettato per l'uso solo in funzionamento a 12 V CC con massa negativa.
- Prima di eseguire i collegamenti, scollegare il terminale di massa della batteria dell'auto per evitare cortocircuiti.
- Collegare il cavo rosso di ingresso alimentazione solo dopo aver collegato tutti gli altri cavi e assicurarsi di collegarlo al terminale di alimentazione positivo da 12 V. Questo terminale è sotto tensione quando la chiavetta di accensione si trova nella posizione accessoria.
- Portare tutti i cavi di massa a un punto di massa comune.

Waarschuwing

- Dit apparaat is uitsluitend geschikt voor gebruik op gelijkstroom van een 12 Volt auto-accu, negatief geaard.
- Alvorens te beginnen met het maken van aansluitingen, dient de aardkleem van de auto-accu te worden losgemaakt. Dit om kortsluiting te voorkomen.
- Sluit de rode stroomdraad pas aan nadat alle andere aansluitingen zijn gemaakt. Zorg ervoor dat deze stroomdraad op de positieve 12 V accu-aansluiting wordt aangesloten. De draad komt dan onder spanning te staan, wanneer de contactsluitel in de "ACC" stand wordt gezet.
- Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.

When the Unit is Used in a Car with No Accessory Position on the Ignition Key — POWER SELECT Switch

The illumination on the front panel is factory-set to be turned on even when the unit is not being played. However, this setting may cause some car battery wear if the unit is used in a car with no accessory position on the ignition key. To avoid this battery wear when using the unit in such a car, set the POWER SELECT switch located at the bottom of the unit to the OFF position, then press the reset button on the front panel of the unit. The illumination is reset to stay off while the unit is not being played.

Note
The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the OFF position.

Quand l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoire — Interrupteur POWER SELECT

L'éclairage du panneau avant est réglé en usine de façon à s'allumer même quand l'appareil ne fonctionne pas. Cependant, ce réglage risque d'épuiser la batterie si l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoire. Pour éviter ce désagrément, commutateur l'Interrupteur POWER SELECT situé sur le fond de l'appareil sur OFF, puis appuyer sur la touche de réinitialisation. L'éclairage est réinitialisé pour rester éteint quand l'appareil n'est pas utilisé.

Remarque
Quand l'Interrupteur POWER SELECT est commuté sur OFF, l'avertisseur du panneau avant ne fonctionne pas.

Wenn das Zündschloß Ihres Wagens keine Zübehörposition besitzt — POWER SELECT-Schalter

Das Gerät ist werkseitig so voreingestellt, daß das Bedienungslicht auch dann beleuchtet ist, wenn das Gerät nicht betrieben wird. Besitzt das Zündschloß Ihres Fahrzeugs keine Zübehörposition, so ist diese Beleuchtung ständig eingeschaltet und entzieht der Batterie Strom. Stellen Sie in einem solchen Fall den POWER SELECT-Schalter an der Unterseite des Gerätes auf OFF, und drücken Sie dann die Rückstellaste an der Vorderseite des Geräts. Bei ausgeschaltetem Gerät ist das Bedienungslicht dann nicht mehr beleuchtet.

Hinweis
Der Warnton ist nicht aktiviert, wenn der POWER SELECT-Schalter auf OFF gestellt ist.

Quando si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione — Interruttore POWER SELECT

L'illuminazione del pannello anteriore è stata predisposta in fabbrica per l'attivazione anche quando non si usa l'apparecchio. Tuttavia questa regolazione può causare lo scaricamento della batteria dell'auto se si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione. Per evitare lo scaricamento della batteria quando si usa l'apparecchio in questo tipo di auto, regolare sulla posizione OFF l'interruttore POWER SELECT situato sul fondo dell'apparecchio e quindi premere il pulsante di azzeramento sul pannello anteriore dell'apparecchio. L'illuminazione viene così regolata per lo spegnimento quando non si usa l'apparecchio.

Nota
La suoneria di avvertimento per il pannello anteriore non si attiva quando l'interruttore POWER SELECT è regolato sulla posizione OFF.

Als het contactslot van uw auto geen "ACC" stand heeft — Stroomkeuzeschakelaar (POWER SELECT)

Het apparaat is in de fabriek zo ingesteld dat de verlichting van het voorpaneel altijd aan is, zelfs al is het apparaat zelf uitgeschakeld. Als het apparaat echter wordt gemonteerd in een auto waar het contactslot geen "ACC" stand heeft, kan dit leiden tot onnodige uitputting van de accu. Om dit te vermijden, zet u de stroom-keuzeschakelaar (POWER SELECT) aan de onderkant van het apparaat in de "OFF" stand, en vervolgens drukt u de terugstelttoets in. Met de keuzeschakelaar in deze stand zal de verlichting van het voorpaneel gedoofd zijn, zolang het apparaat niet is ingeschakeld.

Opmerking
Zolang de stroomkeuzeschakelaar (POWER SELECT) in de "OFF" stand staat, werkt de waarschuwingstoon op het voorpaneel van het apparaat niet.

When Two Antennas are Used in the FM Reception (Diversity Reception System) — FM DIVERSITY Switch

This unit can be connected with diversity antennas. If you use this unit with the diversity antennas, set the FM DIVERSITY switch located at the bottom of the unit to the ON position to activate the diversity system.

Quand deux antennes sont utilisées pour la réception FM (Système de réception à rayonnement zénithal réduit) — Interrupteur FM DIVERSITY

Cet appareil accepte le branchement d'antennes à rayonnement zénithal réduit. Pour pouvoir utiliser l'appareil avec ce type d'antenne, commutateur l'Interrupteur FM DIVERSITY situé sur le dessus de l'appareil sur ON, afin d'activer le système de diversité.

Bei Verwendung einer UKW-Diversity-Antenne — FM DIVERSITY-Schalter

Bei Verwendung einer UKW-Diversity-Antenne stellen Sie den FM DIVERSITY-Schalter an der Unterseite des Gerätes auf ON.

Quando si usano due antenne per la ricezione FM (Sistema di ricezione a diversità di frequenza) — Interruttore FM DIVERSITY

Questo apparecchio può essere collegato ad antenne a diversità di frequenza. Se si usa questo apparecchio con antenne a diversità di frequenza, regolare sulla posizione ON l'interruttore FM DIVERSITY situato sul fondo dell'apparecchio per attivare il sistema a diversità di frequenza.

Bij gebruik van twee antennes voor FM ontvangst (Meervoudig ontvangst-systeem) — Gebruik van de FM DIVERSITY schakelaar

Dit apparaat is geschikt voor het meervoudig antennesysteem. Bij gebruik van een meervoudige antenne dient u de FM DIVERSITY schakelaar aan de bovenkant van het apparaat in de "ON" stand te zetten.

When you do not use the FM diversity antennas
If you wish to connect a conventional rod antenna, be sure to connect it to the antenna connector of the unit marked "MAIN", and set the FM DIVERSITY switch to the OFF position.

Quand on n'utilise pas d'antenne à rayonnement zénithal réduit
Pour brancher une antenne conventionnelle, veiller à raccorder celle-ci au connecteur d'antenne de l'appareil, marqué "MAIN", et commutateur l'Interrupteur FM DIVERSITY sur OFF.

Wenn keine Diversity-Antenne verwendet wird
Bei Anschluß einer herkömmlichen Teleskopantenne muß diese an den mit "MAIN" gekennzeichneten Antennenanschluss angeschlossen und der FM DIVERSITY-Schalter auf OFF gestellt werden.

Quando non si usano antenne FM a diversità di frequenza
Se si desidera collegare una normale antenna ad asta, assicurarsi di collegarla al connettore antenna dell'apparecchio contrassegnato con "MAIN", e regolare l'interruttore FM DIVERSITY sulla posizione OFF.

Bij aansluiten van een gewone antenne met slechts één aansluiting
Maakt u geen gebruik van het meervoudig FM-antennesysteem, maar een gewone spiraalantenne met een enkele aansluiting, sluit deze dan aan op de "MAIN" ANT aansluiting, en zet de FM DIVERSITY schakelaar in de "OFF" stand.

Notes
• The radio reception will be disturbed by noise if the connection of the antennas was not made properly or the FM DIVERSITY switch was not set correctly.
• For details about the diversity antennas, refer to their instructions manual.

Remarques
• La réception radio risque d'être parasitée si le raccordement des antennes a été mal réalisé ou si l'Interrupteur FM DIVERSITY n'est pas correctement réglé.
• Pour les détails sur les antennes à rayonnement zénithal réduit, se reporter à leur mode d'emploi.

Hinweise
• Wenn die Antenne nicht richtig angeschlossen ist oder der FM DIVERSITY-Schalter in der falschen Position steht, ist der Radioempfang durch Störungen beeinträchtigt.
• Einzelheiten zur UKW-Diversity-Antenne entnehmen Sie der bei der betreffenden Antenne mitgelieferten Anleitung.

Note
• La ricezione radio è disturbata se il collegamento delle antenne non viene eseguito correttamente o se l'interruttore FM DIVERSITY non è regolato correttamente.
• Per dettagli sull'antenna a diversità di frequenza, fare riferimento al suo manuale di istruzioni.

Opmerkingen
• Er kan storing in de radio-ontvangst optreden als de antenne niet op de juiste wijze is aangesloten of wanneer de FM DIVERSITY schakelaar niet in de juiste stand staat.
• Zie voor nadere bijzonderheden de gebruiksaanwijzing van de meervoudige antenne.

Connection Diagram

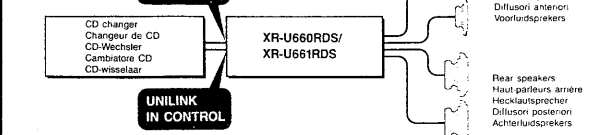
Schéma de connexion

Anschlußdiagramm

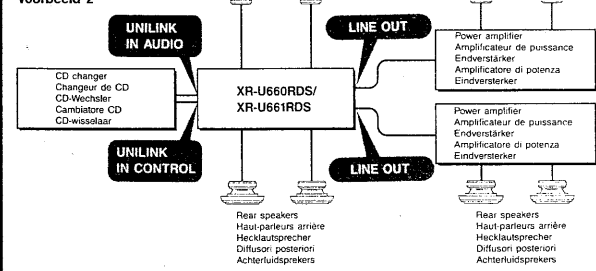
Schema di collegamento

Aansluitschema's

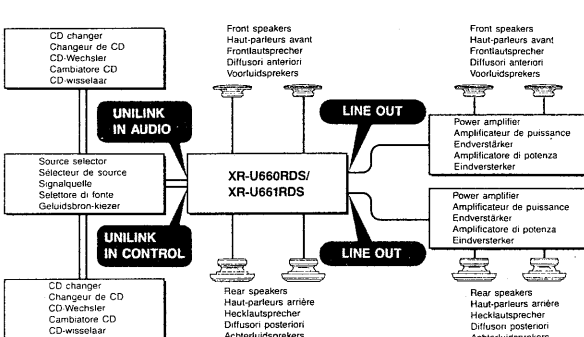
Example 1
Exemple 1
Beispiel 1
Esempio 1
Voorbeeld 1



Example 2
Exemple 2
Beispiel 2
Esempio 2
Voorbeeld 2



Example 3
Exemple 3
Beispiel 3
Esempio 3
Voorbeeld 3



If you connect two or more CD changers, the source selector XA-U20 or XA-U40 (not supplied) is required.
Si deux changeurs de CD ou plus sont utilisés, un sélecteur de source XA-U20 ou XA-U40, (non fourni), est requis.
Bei Anschluß von mehr als einem CD-Wechsler ist der nicht mitgeliefert Signalquellenwähler XA-U20 oder XA-U40 erforderlich.
Se si collegano due o più cambiatori CD, è necessario il selettore di fonte (non in dotazione) XA-U20 o XA-U40.
Voor het aansluiten van twee of meer CD-wisselaars is de XA-U20 of XA-U40 geluidsbron-keizer (niet bijgeleverd) vereist.

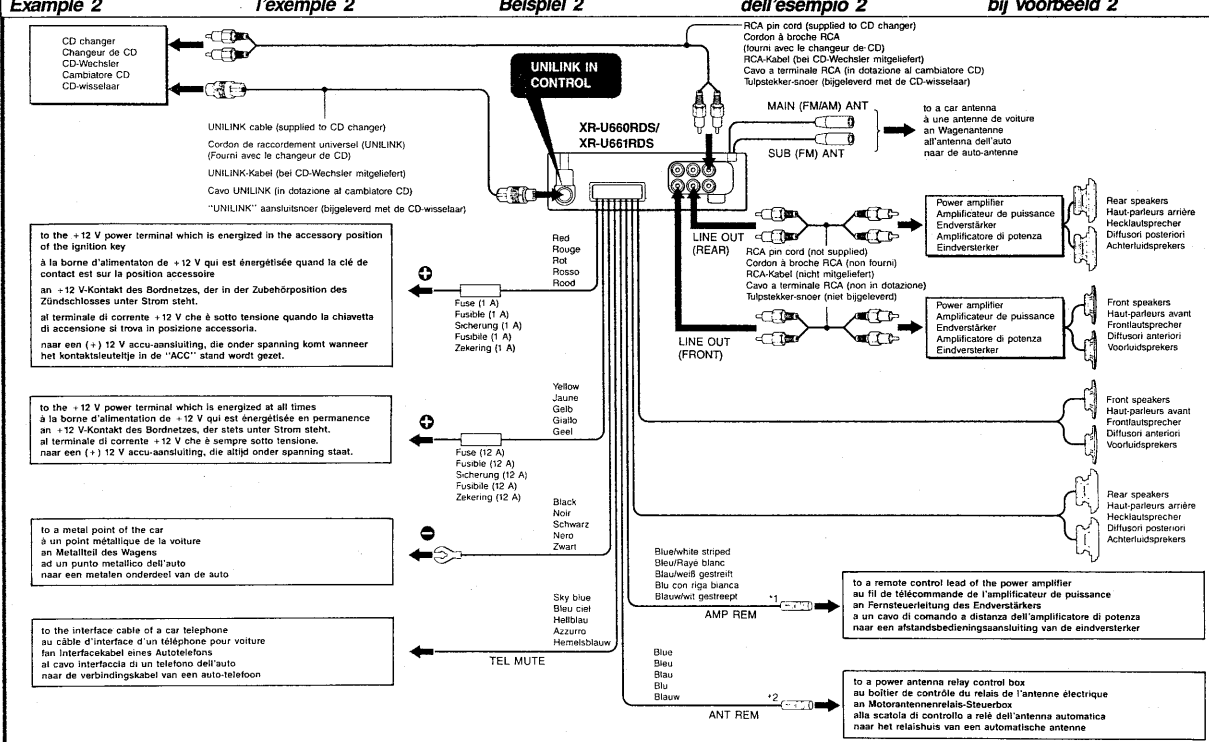
Connections of Example 2

Connexions de l'exemple 2

Anschlußplan zu Beispiel 2

Collegamenti dell'esempio 2

Volledige aansluitingen bij voorbeeld 2



Press the reset button on the front panel after completing the connections.

Les connexions achevées, appuyer sur la touche de réinitialisation sur le panneau avant.

Nach dem Anschluß drücken Sie die Rückstellaste an der Vorderseite des Gerätes.

Premere il pulsante di azzeramento sul pannello anteriore dopo aver completato i collegamenti.

Druk na het maken van alle aansluitingen op de terugstelttoets op het voorpaneel van dit apparaat.

Notes on the control leads
• The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) function, AF (Automatic Frequency) function or TA (Traffic Announcement) function.
• A power antenna without relay box cannot be used with this unit. For details about the power antenna, refer to its instructions manual.

Remarques sur les fils de contrôle
• Le fil de contrôle de l'antenne électrique (bleu) fournit un courant continu de 12 volts quand le tuner est mis sous tension, ou quand la fonction ATA (activation automatique du tuner), fonction AF (fréquences alternatives) ou TA (annonces routières) est mise en service.
• Une antenne électrique sans boîtier de relais ne peut être utilisée avec cet appareil. Pour les détails sur l'antenne électrique, se reporter à son mode d'emploi.

Hinweise zu den Steuerleitungen
• Die Motorantennen-Steuerleitung (blau) stellt unter +12 V Gleichspannung, wenn der Tuner eingeschaltet, die ATA-Funktion (Automatic Tuner Activation) die AF-Funktion (Automatische Umschaltung auf Alternativfrequenz) oder die TA-Funktion (Verkehrsfunkempfang) aktiviert ist.
• Eine Motorantenne ohne Relaisbox kann nicht verwendet werden. Einzelheiten zur Motorantenne entnehmen Sie der Anleitung der betreffenden Antenne.

Note sui cavi di controllo
• Il cavo di controllo dell'antenna automatica (blu) fornisce +12 V CC quando si accende il sintonizzatore o si attiva la funzione ATA (attivazione automatica della radio) funzione AF (frequenza alternativa) o funzione TA (notiziario sul traffico).
• Non è possibile usare un'antenna automatica senza scatola a rele con questo apparecchio. Per dettagli sull'antenna automatica, fare riferimento al suo manuale di istruzioni.

Opmerkingen betreffende de bedieningsaansluitingen
• Het aansluittoestel voor de automatische antenne (blauw) levert +12 V gelijkstroom als de tuner wordt ingeschakeld of als de ATA, automatische tuner-omschakelfunctie, de AF zenderzoekfunctie of de TA verkeersinformatiefunctie in werking tredt.
• Met dit apparaat is het niet mogelijk een automatische antenne zonder relaisbox te gebruiken. Zie de gebruiksaanwijzing van de automatische antenne voor nadere bijzonderheden over de antenne.

- Before operating the unit for the first time or after replacing the car battery, press the reset button on the front panel with a ball-point pen etc., and then start operating the unit.
- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Notes on Cassettes

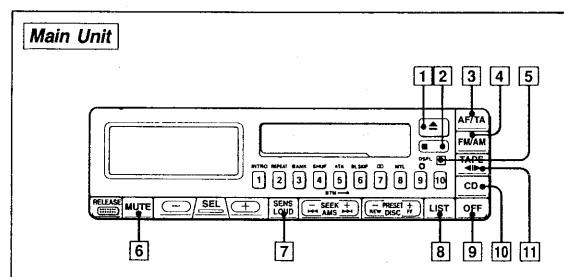
Cassette care

- **Cassette care**
- Avoid touching the tape surface of a cassette, as any dirt or dust will contaminate the heads.
- Keep cassettes away from equipment with built-in magnets such as speakers and amplifiers, as erasure or distortion on the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.
- The cassette shell may become warm when the tape is played back for a long period of time because of the built-in power amplifier. However, this is not a sign of a malfunction.

Note on cassettes longer than 90 minutes

The use of cassettes longer than 90 minutes is not recommended except for long continuous play. The tapes used for these cassettes are very thin and tends to be stretched easily. Frequent playing and stopping operation for these tapes may cause them to be pulled into the cassette deck mechanism.

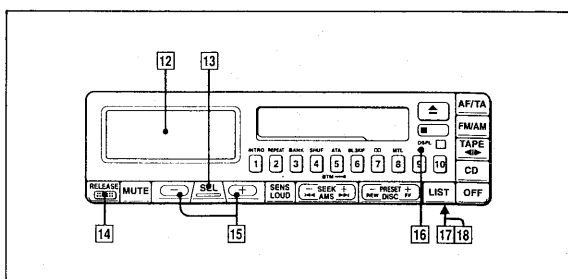
Location and Function of Controls



Refer to the pages in ● for details.

- 1  (eject) button 
 - 2 Receptor for the optional remote commander
 - 3 AF/TA (Alternative Frequency/Traffic Announcement) button  
 - 4 FM/AM (radio on/band select) button (XR-U660RDS) 
FM/MW/LW (radio on/band select) button (XR-U661RDS) 
 - 5 DSPL (display change/time set) button       
 - 6 MUTE button
- Press to mute the sound momentarily.
Press again to restore the same volume level. This button will be also canceled in the following cases:
- when the  or OFF button is pressed.
 - when ejecting a cassette by pressing the  button during tape playback.
 - when the ignition key of your car has been turned to the OFF position for more than eight seconds.
- 7 SENS/LOUD (sensitivity/loudness) button
Press for more than two seconds to reinforce the bass and treble especially when listening at a low volume level. To disengage the button, press it again for more than two seconds.
 - 8 LIST (custom-file list) button    
 - 9 OFF button
Press to turn off the unit.
 - 10 CD (disc play/CD changer select) button  
 - 11 TAPE  (playback/transport direction change) button  

Location and Function of Controls



- 13** **Display window**

SEL (control mode select) button
Press to select the desired control mode:
BAS (bass), TRE (treble), BAL (balance),
FAD (fader) or VOL (volume).

Display window	Control mode	 SEL 	
		Press 	Press 
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FAD	Fader control	To decrease the rear-speakers' volume	To decrease the front-speakers' volume
VOL	Volume control	For less volume	For more volume

14 **RELEASE (front panel release) button**
Press to detach the front panel.

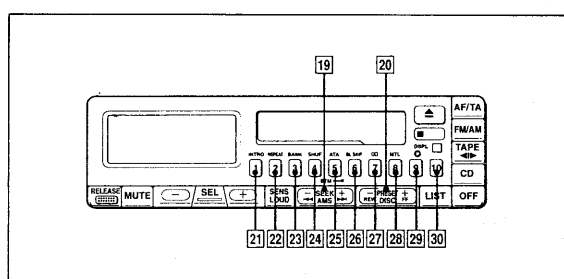
15  **(bass/treble/balance/fader/volume control) buttons**
These buttons normally function as the volume control. To adjust other modes, press the  or  button within three seconds after selecting the desired mode with the SEL button. The control mode automatically goes back to the volume control mode in three seconds.

16 **Reset button**
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function.

17 **FM DIVERSITY SWITCH (located on the bottom of the unit)**
See "FM DIVERSITY Switch" in the Installation/Connections manual.

18 **POWER SELECT switch (located on the bottom of the unit)**
See "POWER SELECT Switch" in the Installation/Connections manual.

Display window	Control mode	SEL 	
		Press 	Press 
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FAD	Fader control	To decrease the rear speakers' volume	To decrease the front speakers' volume
VOL	Volume control	For less volume	For more volume



	During tape playback	During disc play	During radio reception
19	AMS (Automatic Music Sensor) button ① ②		SEEK (automatic tuning/bes- tuning memory) button ② ③
20	FF/REW (fast-forward/ rewind) button ⑤	DISC (disc search/manual search) button ③ ⑤	PRESET (preset search/ manual tuning) button ② ③
21	INTRO (track cue play) button ③ ④		
22	REPEAT (repeat play) button ⑤		
23	—	BANK button ⑤	
24	—	SHUF (shuffle play) button ⑤	
25	ATA (Automatic Tuner Activation) button ②	—	Preset number buttons ② ③
26	BL.SKIP (blank skip) button ②	—	
27	□□ (Dolby NR) button ④	—	
28	MTL (metal/C-O ₂) button ③	—	
29	—	—	
30	—	—	

The buttons **[21]** – **[30]** function as direct disc selection buttons as well during disc play by a CD changer. (page 36)

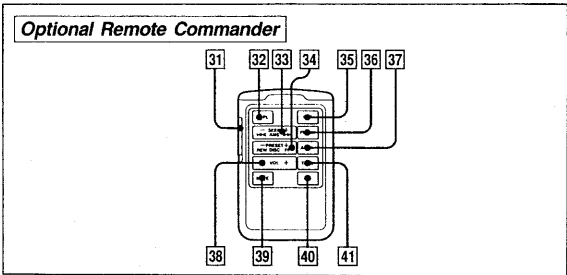
Changing the illumination color

Press the **INTRO** button while pressing the SEL button

Muting a beep sound

Press the **6** button while pressing the SEL button. To obtain the beep sound again, press these buttons once more.

Location and Function of Controls



Buttons of the same function as those on the main unit

32 DSPL (display change) button ① ② ③ ④

	During tape playback	During disc play	During radio reception
33	AMS (Automatic Music Sensor) button ⑤ ⑥		SEEK (auto-tuning) button ⑦

35 OFF button

36 FM/AM (radio on/band select) button (XR-U660RDS) ⑧

FM/MW/LW (radio on/band select) button (XR-U661RDS) ⑨

37 AF/TA (Alternative Frequency/Traffic Announcement) button ⑩ ⑪
Use this button for the RDS station reception.

39 MUTE button

40 CD (disc play/CD changer select) button ⑫ ⑬

41 TAPE (playback/transport direction change) button ⑭ ⑮

Different function buttons

31 M.I.L.L. (memory illumination) switch
To illuminate the buttons on the remote commander, slide down this switch. The illumination goes off automatically after about 15 seconds.

	During tape playback	During disc play	During radio reception
34	FF/REW (fast-forward/rewind) button ⑯	DISC (disc search) button ⑰ ⑱	PRESET (preset search) button ⑲

You cannot do the manual search and manual tuning with the remote commander.

38 VOL (volume) button

This button adjusts only the volume level.

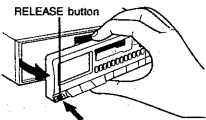
When the POWER SELECT switch is set to the OFF position, the unit cannot be operated with the remote commander unless one of the FM/AM (FM/MW/LW), TAPE or CD buttons of the unit is pressed or a cassette is inserted to activate the unit first.

10

Detaching and Attaching the Front Panel

Detaching the Front Panel

Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel and detach the panel by pulling it towards you as illustrated.



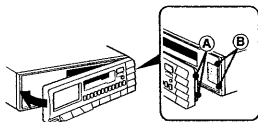
Be sure not to drop the panel when detaching it from the unit.

Note

The display window may become warm while the unit is operated, however, this is not a sign of a malfunction.

Attaching the Front Panel

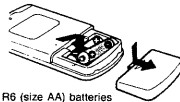
Apply the right hand side of the front panel to the unit by attaching the part (A) of the front panel to the part (B) of the unit as illustrated and push until it clicks.



Do not press hard or give excessive pressure to the display window of the front panel.

12

Installing the Batteries



Two R6 (size AA) batteries

Battery life

When the batteries become weak, you will not be able to operate the unit with the remote commander. Battery life is approx. six months although it depends on the way of use.

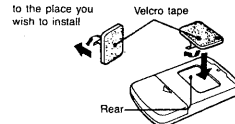
Notes on batteries

To avoid damage from battery leakage and corrosion:

- insert the batteries with correct polarity
- do not use an old battery with a new one, or different types of batteries together
- remove the batteries when you do not use the unit for a long period of time
- do not charge the batteries.

If any battery leakage occurs, replace the batteries with new ones after cleaning the battery compartment.

Installing the Optional Remote Commander



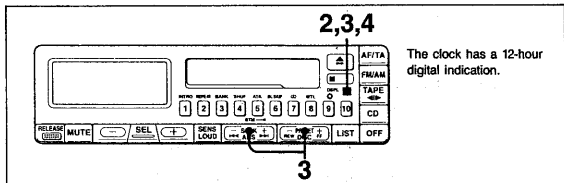
Install the remote commander with velcro tape in a desired place.

Notes

- Do not install or leave the remote commander in a location near any heat sources, or in a place subject to direct sunlight (especially on the dashboard in summer etc.).
- When you park the car in direct sunlight, detach the remote commander and place it in a location not subject to direct sunlight such as the glove-box.
- Before installing the remote commander, be sure to confirm whether you can remote control the unit from the place you intend to install.
- Before attaching the velcro tape, clean the surface.

11

Setting the Clock



The clock has a 12-hour digital indication.

For example, set it to 10:08.

1 Turn the ignition key to the ON position.

2 Press the DSPL button if the clock indication does not come on.

3 Press the DSPL button for more than two seconds.

While holding down the DSPL button

Press **SEEK** to set the hour digits
(to go back) (to go forward)

Press **PRESET** to set the minute digits
(to go back) (to go forward)

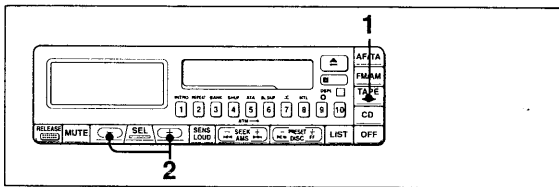
4 The clock starts activating when you take your finger off the DSPL button.

Notes

- You cannot set the clock with the optional remote commander.
- If the POWER SELECT switch of the unit is set to the OFF position, the clock cannot be set unless the power is turned on. Set the clock after you turn on the radio, start CD play, or play back a tape.

13

Listening to the Tape Playback



1 Insert a cassette to start playback.



If a cassette is already inserted



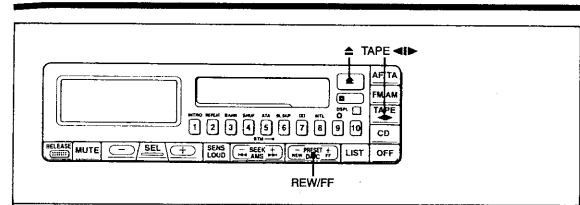
2 Adjust the volume with the $\leftarrow$ or $\rightarrow$ button.



Getting the clock indication during a tape playback



Press it again to return to the previous indication.



Other Operations

To fast-forward



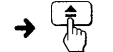
To rewind



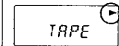
To listen to the reverse side of a cassette



To eject the tape



Tape transport direction indication



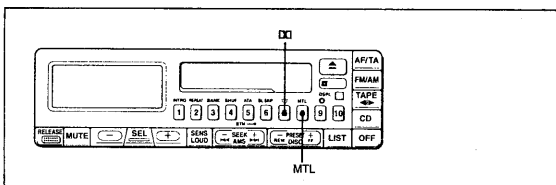
The side facing up is being played.



The side facing down is being played.

14

Listening to the Tape Playback



Listening to the CrO₂ (TYPE II) or Metal (TYPE IV) Tapes



The "MTL" indication appears in the display window. To listen to the normal (TYPE I) tapes, press the button again.

Listening to a Tape Recorded in the Dolby-NR System

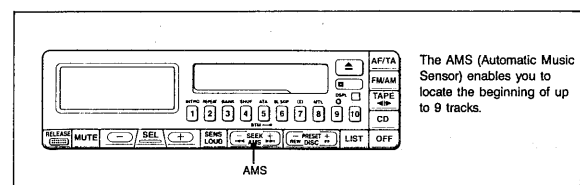
This unit adapts to the tapes recorded in the Dolby B and Dolby C NR system.



Dolby B NR → Dolby C NR → Dolby NR off

The Dolby noise reduction system reduces the hiss noises which occur during tape playback in the treble and bass areas. This system emphasizes the treble area during the recording and returns it to the original level at the playback. Therefore, when you listen to the tapes which are recorded in the Dolby NR system, be sure to use the Dolby NR system during a playback as well.

Locating a Desired Track —AMS Function



The AMS (Automatic Music Sensor) enables you to locate the beginning of up to 9 tracks.

During playback, press the AMS button for the same number of times as the number of tracks you wish to skip.

To locate the beginning of the tracks ahead



To locate the beginning of the previous tracks



The number of times that you pressed the AMS button will be displayed on the display window. Be sure to include the current track in the number of the tracks you wish to skip.

The AMS may not function properly and the track starting positions may not be located in the following cases:

- Tapes which contain noises between the tracks are used.
- Tapes which contain less than four second blank spaces in between the tracks are used.
- When you press the AMS button immediately before or after the track which you wish to locate.

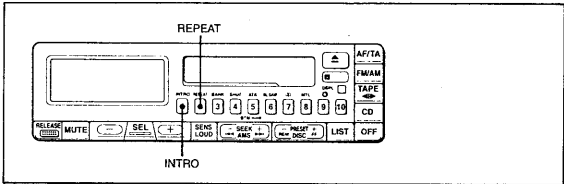
The unit may consider the following as the blank spaces between tracks and start playback:

- Long silent music sections on a track.
- Quiet sections or a continuous low volume sound on a track.
- Tracks which contain a gradual increase and decrease of the sound volume.

16

17

Playing in Other Modes



Searching for a Desired Track by Listening to the First 10 Seconds of Each Track

—Intro Scan Function

During playback  

The first 10 seconds of all the tracks will be played in order from the next track.
When you find the track of your choice, press the button again. The unit will go back to the normal mode.

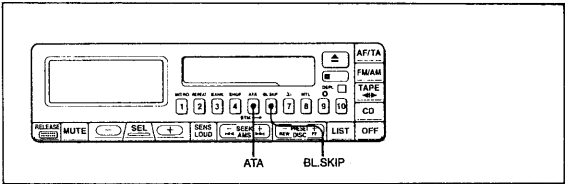
Listening to the Currently Playing Track Repeatedly

—Repeat Play Function

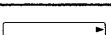


When the track is over, it will return to the beginning and will be repeated again. To cancel this mode, press the button again.

Note
The intro scan function will be canceled if you turn off the unit by pressing the OFF button or turning the ignition key to the OFF position and leaving it for more than eight seconds. However, the blank skip and ATA function will not be canceled unless each button is pressed once again.



Turning on the Radio while the Tape is Being Fast-wound—ATA Function

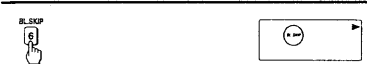
ATA  

If you press either FF or REW during the tape playback, the radio will come on automatically. When the tape playback starts, the radio will be turned off automatically. To cancel the mode, press the button again.

Getting a radio frequency indication on the display window while the radio is turned on using the ATA function
Press the DSPL button several times. The frequency of the last radio program received or the name of the last station received will be indicated on the display window for a few seconds.

Skipping Blank Spaces of the Tape Automatically during Tape Playback

—Blank Skip Function

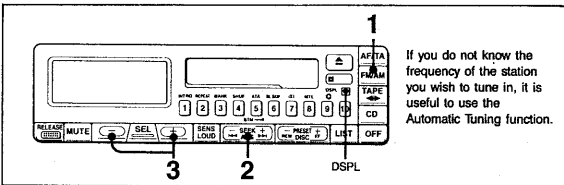


If there is a blank space longer than eight seconds on a tape, the unit automatically fast-forwards the tape to the next track and the playback will start. To cancel the mode, press the button again.

18

Searching for the Stations Automatically

—Automatic Tuning



If you do not know the frequency of the station you wish to tune in, it is useful to use the Automatic Tuning function.

1 Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).

XR-U660RDS XR-U661RDS

2 Press the SEEK button.

For lower frequencies For higher frequencies

The scanning stops when a station is received. Press the button repeatedly until the desired station is received.

3 Adjust the volume with the  or  button.

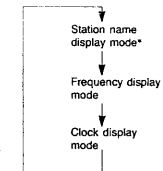
 

While receiving FM broadcasting

FM 1
87.90

The "ST" indication will appear when an FM stereo program with sufficient signal strength is tuned in. The program will be received in stereo.

Getting the clock indication while listening to the radio
Press the DSPL button. Each time you press the button, the display mode changes as follows:

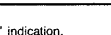


* Refer to page 29 for the station name display mode.

19

Avoiding the Automatic Tuning from Stopping on Stations Too Frequently

—Local Seek Mode

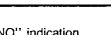
SENS  

Press the SENS button lightly to get the "LCL" indication.

FM 1
87.90

The mode changes to the local seek mode where only the stations with relatively strong signals are tuned in. It functions only when the Automatic Tuning is in operation.

If FM Stereo Broadcasting is Difficult to Receive—Monaural Mode

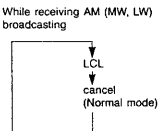
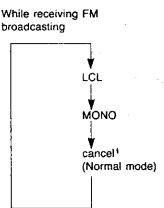
SENS  

Press the SENS button lightly to get the "MONO" indication.

FM 1
87.90

The sound improves, but it will become monaural.

Each time you press the SENS button, the mode changes as follows:



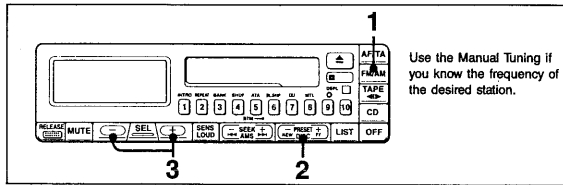
Note
The SENS button also functions as the LOUD button if it is kept pressed for more than two seconds.

20

21

Tuning in by Adjusting the Frequency

—Manual Tuning



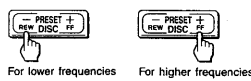
Use the Manual Tuning if you know the frequency of the desired station.

1 Select the desired band from FM1, FM2 or AM (MW, LW).

The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



2 Press the PRESET button for more than 0.5 second.



For lower frequencies For higher frequencies

3 Adjust the volume with the or button.

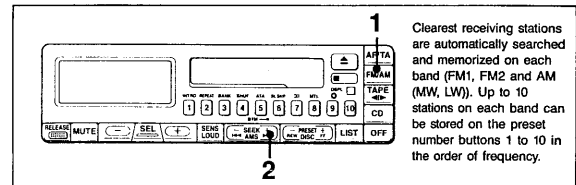


Note
You cannot use the Manual Tuning with the optional remote commander.

PREVENTING ACCIDENTS!
While you are driving, the use of the Automatic Tuning and the BTM function is recommended in favor of the Manual Tuning.

Memorizing the Stations Automatically

—BTM (Best Tuning Memory) Function



Clearer receiving stations are automatically searched and memorized on each band (FM1, FM2 and AM (MW, LW)). Up to 10 stations on each band can be stored on the preset number buttons 1 to 10 in the order of frequency.

1 Select the desired band from FM1, FM2 or AM (MW, LW).

The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



2 Keep the SEEK + button pressed for more than two seconds.



The receivable frequencies of FM1 and FM2 are the same. Therefore, 20 stations can be memorized on FM.

22

Memorizing the Stations Automatically

The BTM function — how this function operates

This function starts by searching stations from the lowest frequency of the currently tuned in band. When a station is located, it will be stored in the memory on the preset number button whose number is indicated on the display window. If there is no preset number indicated, it will be stored in the memory on the preset number button 1 onward. It continues to store the stations in the memory until all the preset number buttons are occupied.

For example, if the FM1 band was selected, it will continue until the preset number button 10 on the FM2 band is occupied.

When all the preset number buttons are occupied with the memories before the highest receivable frequency is searched, the unit will start searching for higher frequencies from where it was left off. This is to check if there are any more stations with clearer receptions than the ones already stored in the memory.

Lastly, it rearranges all the stations in the order of frequency from the lowest and stores them in the memory. The whole operation is now completed. The stations with clearer receptions are stored in the memory on the preset number buttons in the order of frequency.

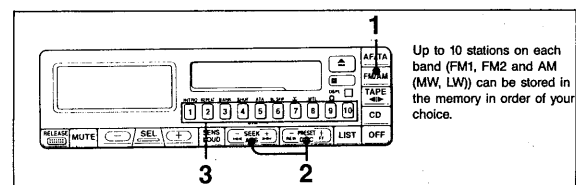
Notes

- There may be cases where there are not enough receivable stations due to the lack of stations in the vicinity or weak broadcasting signals. In such cases, the BTM operation may stop without all the buttons being occupied with memories.
- If you start the BTM operation from the FM1 band, it will continue to store stations in the memory on the FM2 band. Care must be taken if you wish to keep the stored stations on the FM2 band.
- If you start the BTM operation from the FM2 band, it will stop when all the memories on the FM2 band are occupied. It will not continue to the FM1 band.

24

23

Memorizing Only the Desired Stations



Up to 10 stations on each band (FM1, FM2 and AM (MW, LW)) can be stored in the memory in order of your choice.

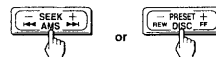
For example, store a station on the preset number button 1.

1 Select the desired band from FM1, FM2 or AM (MW, LW).

The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



2 Tune in the station which you wish to store on the preset number button (page 20 or 22).



3 Keep the preset number button pressed for about two seconds until the "MEM" indication comes on the display window.



The number of the preset number button of which you are pressing now comes on the display window. When the "MEM" indication comes on, the station is stored in the memory and the operation is now completed. The "MEM" indication goes off after a while.

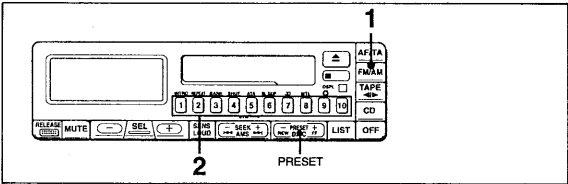
Repeat the same procedure to store other stations.

Only one station per band (FM1, FM2 and AM (MW, LW)) can be stored in the memory on each preset number button. If you try to store another station on the same preset number button, the previously stored station will be erased.

If the station to be memorized is an RDS station. If the unit is tuned to an FM band and a station to be memorized happens to be an RDS station transmitting the AF data, the unit will memorize the AF data as well. (See "Network Stations Memory" page 31.)

25

Receiving Stations Stored in the Memory



1 Select the desired band from FM1, FM2 or AM (MW, LW).

The band changes in the following order:
FM1 → FM2 → AM (MW → LW).

FM/AM

XR-U660RDS

FM MW/LW

XR-U661RDS

2 Press the preset number button lightly on which the desired station is to be stored.

INTRO

1

10

Notes

- There may be cases where even the stations which are stored in the memory cannot be received due to weak signals in the vicinity of your car.
- If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, make sure that the preset number button is pressed lightly.

Receiving in Order the Stations Stored in the Memory—Preset Search Function

PRESET +

NEW DISC

1

The number will advance in the following order:

1 → 2 → 3 → ... → 8 → 9 → 10 → 1 → ...
(number of the preset number buttons)

(Press lightly.)

PRESET +

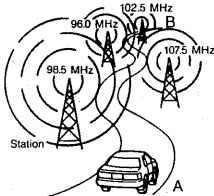
NEW DISC

1

The number will reverse in the following order:

1 → 10 → 9 → ... → 4 → 3 → 2 → 1 → ...
(Press lightly.)

Overview of the RDS Function



Automatic Re-tuning — AF Function (page 30)

This function automatically re-tunes in a station with a relatively stronger signal within the same broadcasting network using the PI and AF data.

The illustration above shows an example of a car passing through an area with four stations of the same broadcasting network between points A and B.

As the car moves on, the reception frequency of the station in the network changes from 98.5 MHz to 107.5 MHz then to 96.0 MHz and to 102.5 MHz.

By using the AF function, the driver will be able to keep listening to a program in the same broadcasting network without tuning in the station manually every time he enters a different frequency zone between points A and B.

Traffic Announcement Reception — TA Function (page 32)

This function searches and stands by for a traffic announcement station using the TP and TA data.

Using this function, the unit automatically searches the station and changes its mode to receive the traffic announcement when the broadcasting starts while you are listening to a tape or CD play.

Overview of the RDS Function

What is RDS?

The RDS (Radio Data System) is a radio digital information system developed and introduced in 1987 by the EBU (European Broadcasting Union). Using the 57 kHz sub-carrier of FM broadcasting, the RDS enables you to receive a variety of information such as station names and traffic information. It also offers some useful functions such as automatic re-tuning of the best available signal carrying the chosen program.

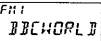
The RDS digital data includes the followings:

- PI Program Identification
- PS Program Service Name
- AF List of Alternative Frequencies
- TP Traffic Program
- TA Traffic Announcement
- PTY Program Type

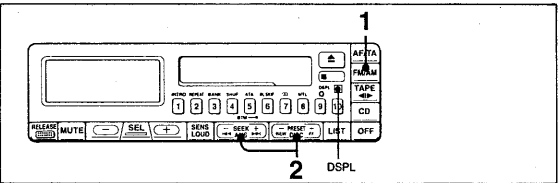
The following functions are available with this unit using the RDS data. Refer to the marked pages for the operational instructions.

Station Service Name Display (page 29)

This function displays the name of the station which is currently tuned in on the display window.



Station Name Display



1 Press to select FM1 or FM2.

FM/AM

XR-U660RDS

FM MW/LW

XR-U661RDS

2 Tune in a desired station by using the Automatic Tuning or Manual Tuning (page 20 or 22).

SEEK +

AMS

or

PRESET +

NEW DISC

If the unit is set in the station name display mode and a station transmitting the RDS data is received, the name of that station will be displayed on the display window.

When the "-----" indication appears on the display window in the station name display mode
The received station is not an RDS station.

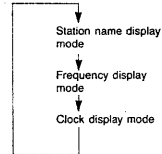
When the unit is in the frequency display mode and an RDS station is received
The "X" display will come on to indicate that an RDS station is received. To find out the name of the station, press the DSPL button to change the display mode.

Notes

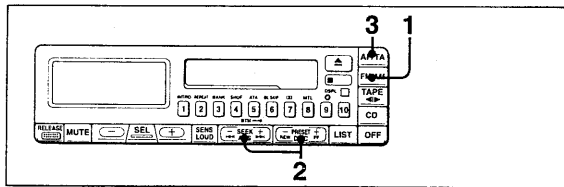
- The RDS data can be received only on the FM band.
- The RDS functions of this unit will not be activated if the FM station being received is not transmitting the RDS data. It may also not work properly in areas where the RDS transmissions are in the experimental stage.

You can change the display mode by pressing the DSPL button.

Each time you press the button, the display mode changes as follows:



Automatic Re-tuning — AF Function



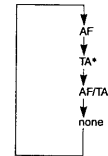
- 1 Press to select the FM1 or FM2.
 XR-U660RDS  XR-U661RDS
 - 2 Tune in a desired RDS station by using the Automatic Tuning or Manual Tuning (page 20 or 22).
 or 
 - 3 Press the AF/TA button to get the "AF" indication.

- If the signal level of the tuned in RDS station falls below a certain point, the unit will begin to search for an alternative station with a stronger signal in the same network from the AF data (List of Alternative Frequencies). If a stronger signal station is found, the unit re-tunes in the station.

Notes

- When the "AF" indication appears on the display window, only the RDS stations can be tuned in by the Automatic Tuning.
- If the tuned in RDS station is not transmitting the AF data, this function will not work.
- If you press the AF/TA button while the AM (MW, LW) band is tuned in, the FM1 band will be automatically selected.

The AF/TA button
Each pressing on the button changes the function cyclically as follows:



* See page 32 about the TA function.

Network Stations Memory

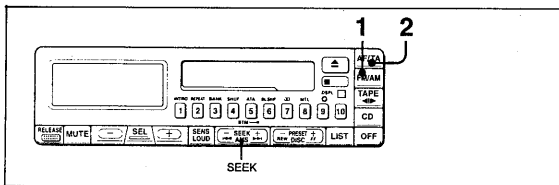
When the unit stores an RDS station transmitting the AF data on a preset number button, it stores not only its frequency but also its PI and AF data. The AF data carries the information of the list of the frequencies of the stations within the same broadcasting network. The unit will store the data in its memory whether the AF function is activated or not.

Getting the Stored RDS Stations in Tune from the Broadcasting Networks

Be sure to press the preset number buttons after pressing the AF/TA button to activate the AF function. The AF function will select a better signal station by re-tuning within the network stations. If you press the preset number buttons without activating the AF function, you will not be able to use this function. In this case, you will only get the individual stations which were tuned in on the previous occasion. The unit will not re-tune to the other stations in the network even if they are stored in the memory.

30

Receiving Traffic Information — TA Function



Receiving a Traffic Announcement Station

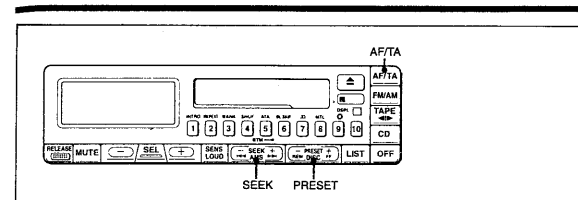
- 1 Press to select the FM1 or FM2.
 XR-U660RDS  XR-U661RDS
 - 2 Press the AF/TA button to get the "TA" indication.

- The search for a traffic announcement station will start. When an RDS station transmitting the TP data is found, the search stops and the "TP" indication will come on the display window.
- The "TA" indication will flash while the traffic announcement broadcasting is on the air. It will stop flashing when the broadcasting is over.
- To search another RDS station transmitting traffic announcement**
Press the SEEK button while the "TA" indication is still on the display window.

Notes

- Do not activate the TA function in an area where there is no traffic announcement broadcasting service available. If you do so, the unit will keep searching for it and other stations cannot be tuned in.
- If you activate the TA function while the AM (MW, LW) band is tuned in, the FM1 band will be automatically selected and the unit will start searching for a traffic announcement station.

"TP" indication
This indicates that the currently tuned in RDS station offers a traffic announcement service.



Standing by for Traffic Announcement while Listening to a Tape or CD.

Press the AF/TA button to get the "TA" indication during a tape playback or CD play.



The playback continues while the unit searches for a traffic announcement station.

When a station is found:
The "TP" indication will come on the display window.



When a traffic announcement broadcasting starts:
The "TA" indication will start flashing. The tape or CD play stops and the traffic announcement will be heard.



When the broadcasting is over:
The tape playback or CD play resumes from where it was left off.

To cancel the stand-by mode
Press the AF/TA button to turn off the "TA" indication.

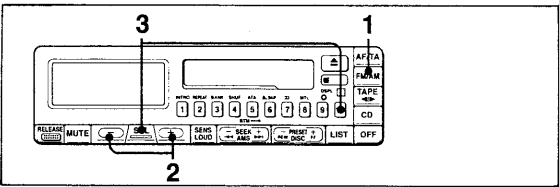
Changing the display to that of the frequency or station name during tape playback or CD play
Press the DSP/L button a few times. While the frequency or station name is being displayed, the SEEK, PRESET buttons and preset number buttons will function in the same way as they do during a radio reception.

31

32

33

Receiving Traffic Information



Traffic Announcement is Heard at the Preset Volume Level

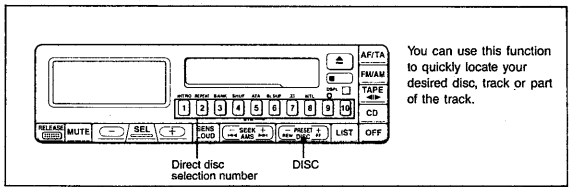
When a traffic announcement broadcast starts, you can hear it at the preset volume level even if the volume control on the front panel has been turned down. (If you are listening to other sources with higher volume level, the level will not change.) The preset volume level can be set in the following manner:

- 1 Press to select FM1 or FM2.
 - 2 Adjust the volume to the desired level with the or button.
 - 3 Press the preset number button 10 while pressing the SEL button.
- A beep sound will be heard when the setting is completed.

PTY (alarm) Data Reception

In case of an emergency, or in a situation where there may be danger from a natural disaster in the area, the RDS stations will transmit the PTY data information to warn drivers that they are in danger. The data includes the character display and the interruption signal for automatically turning on the radio. This data can be received while the AF or TA function is being activated. If the unit receives the PTY data from an RDS station during tape playback or CD play, the "AF" indication on the display window will start flashing and the tape playback or CD play will stop. The radio will be automatically turned on to receive the emergency announcement from the station.

Locating a Desired Disc, Track or Part of a Track



You can use this function to quickly locate your desired disc, track or part of the track.

Searching Your Desired Discs in Turn

—Disc Search

Press the DISC button lightly during CD play.

- To search previous disc numbers →
- To search the disc numbers ahead →

You can search a disc by displaying the titles of the discs registered with the Custom File Function. For details, see page 42.

Locating a Disc Directly

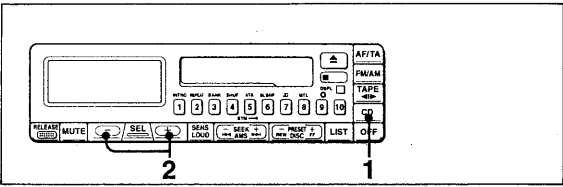
Press the direct disc selection button of your choice for more than two seconds during CD play.



Note
Make sure that you press the DISC button lightly. If you keep it pressed, the unit will enter the Manual Search mode.

Listening to the CD Play

—When Optional Sony CD Changers are Connected

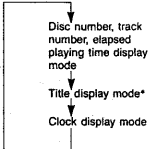


- 1 Press the CD button.

CD play will start.
Disc number:
Track number:
Elapsed playing time:
- 2 Adjust the volume with the or button.

If it is set in the normal playing mode, after the end of a disc, the disc with the next number shown will be automatically played. If two or more CD changers are connected, after the end of the last disc, the first disc in the CD changer with the next number shown will be played. The order of the CD play can be rearranged by changing the playing modes. For details, see "Playing in Other Modes." (page 39)

Getting the clock display while listening to a CD
Press the DSPL button. Each time you press the button, the display mode will change cyclically as follows:



*It is necessary to put titles onto the discs in advance. See pages 42 and 43 for details.

Listening to the Discs in Another CD Changer (when two or more CD changers are connected)

Press the CD button during CD play.



The CD changer number changes.

Locating the Beginning of a Track

—AMS Function

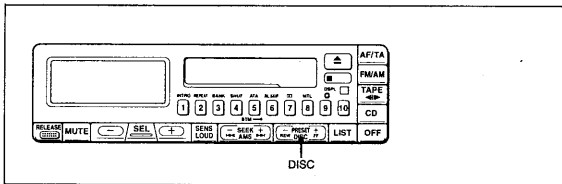
Press the AMS button during CD play.

- To listen to the current track again from the beginning →
- If the button is kept pressed, the beginnings of the previous tracks will be located.

- To listen to the next track from the beginning →
- If the button is kept pressed, the beginnings of the succeeding tracks will be located.

Note
When you keep pressing the AMS button and come to either the beginning or end of a disc, you will not be able to go any further.

Locating a Desired Disc, Track or Part of a Track



Searching for a Desired Part of Track —Manual Search

Keep the DISC button pressed during CD play.

To go ahead



(Keep on pressing)

To go back

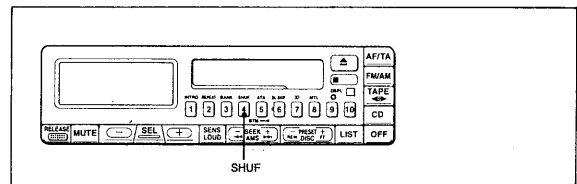


(Keep on pressing)

The elapsed playing time of the track will be displayed on the display window during the manual search.

Note
You cannot use the Manual Search with the optional remote commander.

Playing in Other Modes



Playing the Discs Randomly —Shuffle Play Functions

Playing the tracks on the currently selected disc randomly —Disc shuffle play

Press the SHUF button to get the "SHUF 1" indication during CD play.

When all the tracks on a disc have been played, it goes on to the next disc.

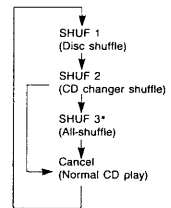
Playing every track on every disc in the currently selected CD changer randomly —CD changer shuffle play

Press the SHUF button to get the "SHUF 2" indication during CD play.

Playing every track on every disc in all CD changers connected randomly —All shuffle play (when two or more CD changers are connected)

Press the SHUF button to get the "SHUF 3" indication during CD play.

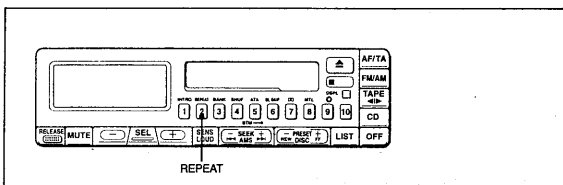
The function of the SHUF button changes cyclically as follows:



* All-shuffle play (SHUF 3) mode functions only when two or more changers are connected to the unit. When only one changer is connected, the "SHUF 3" indication will not be displayed. In this case, if you press the SHUF button again while the "SHUF 2" indication is being displayed, the shuffle play will be canceled.

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Playing in Other Modes



Playing a Disc Repeatedly —Repeat Play Functions

Playing the currently selected track repeatedly —Track repeat

Press the REPEAT button to get the "REP 1" indication during CD play.

When the track is over, the CD play will be repeated from the beginning of that track.

Playing the currently selected disc repeatedly —Disc repeat

Press the REPEAT button to get the "REP 2" indication during CD play.

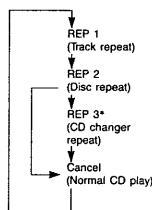
When the last track of the currently selected disc is over, the CD play will be repeated from the beginning of that disc.

Playing the discs in the currently selected CD changer repeatedly —CD changer repeat (when two or more CD changers are connected)

Press the REPEAT button to get the "REP 3" indication during CD play.

When the last disc of the currently selected CD changer is over, the CD play will be repeated from the first disc in the currently selected CD changer.

The function of the REPEAT button changes cyclically as follows:



* CD changer repeat (REP 3) mode functions only when two or more changers are connected to the unit. When only one changer is connected, the "REP 3" indication will not be displayed. In this case, if you press the REPEAT button again while the "REP 2" indication is being displayed, the repeat play will be canceled.

40

Searching for a Desired Track by Listening to the First 10 Seconds of Each Track

—Intro Scan Function

Press the INTRO button during CD play.

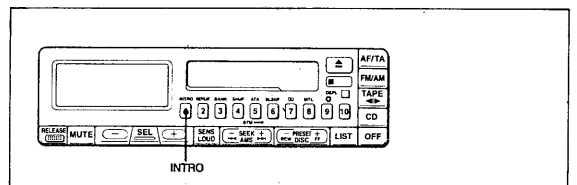
The first 10 seconds of all the tracks on the currently selected disc will be played in order.

When the first 10 seconds of the last track on a disc is played, it will move on to the next disc.

When the first 10 seconds of the last disc in the first CD changer has been played, the first disc in the next CD changer will be played (only when two or more CD changers are connected).

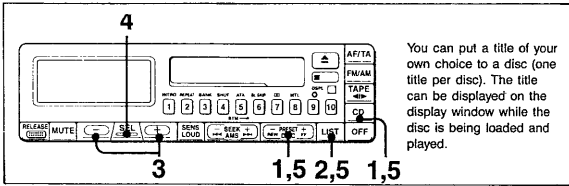
When you find the desired track
Press the INTRO button once more. The intro scan function will be canceled and you can continue to listen to the track.

39



41

Displaying the Title of Each Disc
—Disc Memo Function



You can put a title of your own choice to a disc (one title per disc). The title can be displayed on the display window while the disc is being loaded and played.

Putting Your Personalized Titles onto the Discs

1 Play the disc that you wish to title.

2 Press the LIST button for more than two seconds to enter the name edit mode.

3 Press either the or button to select the desired letters and numbers.

Each time you press the or button, characters will come on in the following order:

→ A→B→C→...→X→Y→Z→0→1→2→3→...

→ \→(→)→\→/→*→+→9→...

4 Press the SEL button after locating the desired letter or number.

The flashing part will move to the next space on the right. Repeat steps 3 and 4 to enter the entire titles. Up to eight characters can be used per disc.

Notes

- If you press the SEL button when the eighth letter (farthest right letter) is flashing, the flashing part goes back to the first letter (farthest left letter).
- If you wish to put a blank space after a character, select "—" (under-bar).

Displaying the Title of Each Disc

Where are the contents of the custom file stored?

The information registered in the custom file will be stored in the memory of currently selected CD changer. You can play a custom-filled disc in another CD changer and use the custom file function as long as they are connected to the currently selected CD changer with the UNILINK system.

You can register the maximum of 110 discs on one CD changer

If you try to register more than 110 discs, the unit will display "FULL" on the display window and will not accept the command for custom-filing. In this case, you will have to erase the memory of the other discs before you enter the new ones. See page 50 for details on erasing the memory.

When two or more CD changers are connected

The information registered in the custom file can be retrieved by other CD changers using the communication signals sent between the CD changers provided that they are connected by UNILINK cables.

5 To register the title, use one of the following methods ① through ④.

① Press the LIST button for more than two seconds.

The unit will go back to the normal CD playing mode.

② Press the LIST button lightly.

The unit enters the PLAY/SKIP mode in which the play and skip modes can be set. (Continue to step 4 in "Setting the Play and Skip Modes on the Discs" of page 46)

(Press lightly)

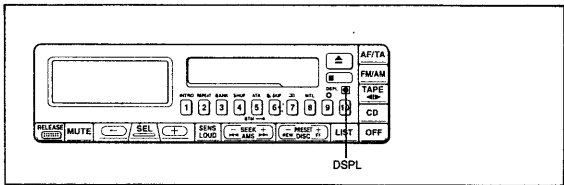
③ Press the DISC button lightly.

You can change the disc and continue to put the titles to the discs.

(Press lightly)

④ Press the CD button. (only when two or more CD changers are connected)

You can go to the next CD changer and the unit will go back to the normal playing mode.



Displaying the Title

While the disc is playing, press the DSPL button to enter the title display mode.

If the title of a disc is not registered, "....." will come on the display window.

While loading the discs

Whatever the display mode is, the indication automatically changes as follows:

Title of the disc (2 seconds)	Disc and track number (2 seconds)	Currently selected display mode

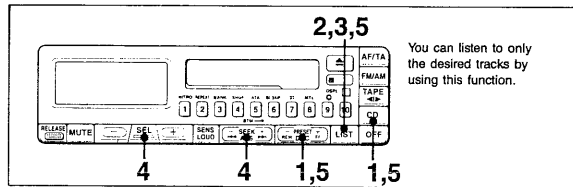
The registered titles of the discs may not come on the display window immediately during loading. This occurs because the unit displays the title after identifying the disc by reading the TOC* (Table of Contents) information of the disc. Therefore, while the CD changer is loading the disc for the first time, the registered title of the disc cannot be displayed. Once the disc has been loaded and played, the TOC information would have been read and the title will be displayed even while the disc is being loaded.

Each time you press the DSPL button while the disc is playing

The indication on the display window will change cyclically as follows:

* The TOC information of the disc contains the total length of playing time and the codes to search the beginning and end of each track, and so on.

Playing Selected Tracks on a Disc —Bank Function



You can listen to only the desired tracks by using this function.

Setting the Play and Skip Modes on the Discs

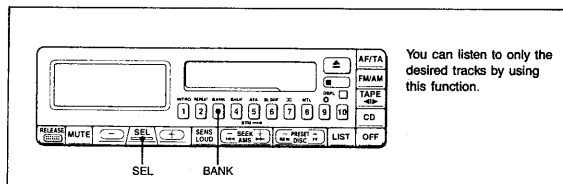
- 1 Play the disc to which you wish to set these modes.
- 2 Press the LIST button for more than two seconds and put the titles onto the discs.
 See page 42 for details about putting on a title. If the title has already been registered, go to step 3.
- 3 Press the LIST button lightly to enter the PLAY/SKIP edit mode.
 When the unit enters the PLAY/SKIP edit mode, the indication on the display window will look like the illustration below.
- 4 Press the AMS button to select the track number you wish to skip and press the SEL button.
 → The indication changes from "PLAY" to "SKIP". If you wish to return to "PLAY", press the SEL button again.
Repeat the operation in this step to set either the "PLAY" or "SKIP" mode on all the tracks.

Notes

- When the title is not registered, you cannot enter the PLAY/SKIP edit mode even if you press the LIST button.
- You can only set the "SKIP" mode onto up to 24 tracks. If a disc has more than 24 tracks, you will not be able to set the SKIP mode on the tracks after the 24th track.
- You cannot set the SKIP mode onto all of the tracks on a disc.

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Playing Selected Tracks on a Disc



You can listen to only the desired tracks by using this function.

Playing with the Bank Function

To play the tracks with "PLAY" settings

Press the BANK button during CD play.



The "BANK" indication will come on the display window. The unit will start playing the tracks with "PLAY" settings which have been set by the PLAY/SKIP mode.

To play the tracks with "SKIP" settings

Press the BANK button while pressing the SEL button.



The "BANK" indication will flash on the display window. The unit starts playing the tracks with "SKIP" settings which have been set by the PLAY/SKIP mode.

To go back to the normal playing mode
Press the BANK button again.

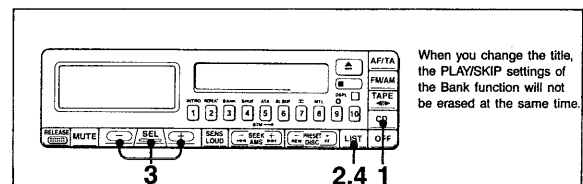
To go back to the normal playing mode
Press the BANK button while pressing the SEL button.

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- 5 To register the settings, use one of the following methods ① through ④.
- ① Press the LIST button for more than two seconds.
 The unit will go back to the normal CD playing mode.
 - ② Press the LIST button lightly.
 (Press lightly.) The unit re-enters the name edit mode. See page 42.
 - ③ Press the DISC button lightly.
 (Press lightly.) You can change the disc and continue to put the titles to the discs.
 - ④ Press the CD button (only when two or more CD changers are connected).
 You can go to the next CD changer and the unit will go back to the normal playing mode.

47

Editing a Custom File



When you change the title, the PLAY/SKIP settings of the Bank function will not be erased at the same time.

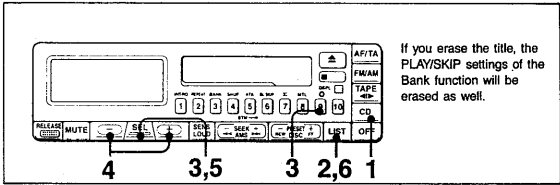
Changing the Title and the PLAY/SKIP Settings

- 1 Play the disc you wish to edit.
- 2 Press the LIST button for more than two seconds to enter the name edit mode.
 The title of the currently played disc will appear on the display window.
- 3 Press the SEL button to make the part you wish to edit flashing. Select the letters and numbers using the or button.
 → or If you wish to change the titles of other discs, repeat steps 1 through 3 on the discs after changing them with the DISC or CD button.
- 4 Press the LIST button for more than two seconds.
 Now the new title is registered.

Note
If you wish to change the PLAY/SKIP settings of the Bank function, press the LIST button lightly to enter the PLAY/SKIP mode while the unit is in the name edit mode in step 2. While checking the disc and track numbers on the display window, change the setting by the AMS and SEL buttons. Press the LIST button lightly again and the unit will enter the name edit mode again.

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Editing a Custom File



If you erase the title, the PLAY/SKIP settings of the Bank function will be erased as well.

Erasing a Title

1 Select the CD changer and play any disc.

2 Press the LIST button for more than two seconds to enter the name edit mode.
 The title of the currently played disc will appear on the display window.

3 Press the preset number button 9 while pressing the SEL button.
 

4 Press the  or  button to search for the title you wish to erase.
The titles stored in the CD changer currently selected will appear on the display window in the same order as they were registered*.

5 Press the SEL button for more than two seconds after the title you wish to erase is displayed.
 Repeat steps 4 and 5 on other titles, if necessary.

6 Press the LIST button for more than two seconds.
 Now the title and the PLAY/SKIP settings are erased. The unit goes back to the normal CD playing mode.

The alternative method to erase a title

You can erase a title by selecting eight " "s (underbars) as described in step 3 of "Changing the Title and the PLAY/SKIP Settings". (page 49)

* If you have erased some of the titles before, they will not come on in the same order as they were registered.

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Troubleshooting Guide

The following check will assist in the correction of most problems which you may encounter with your unit. Before going through the check list below, refer back to the connection and operating procedures.

Radio reception

Trouble	Cause/Solution
Preset tuning is not possible.	- Memorize the correct frequency. - The broadcast is weak. → Use manual tuning.
Automatic tuning is not possible.	The broadcast is weak. → Use manual tuning.
The "ST" indication flashes.	- Tune in precisely. - The broadcast is weak. → Press the SENS button to enter the MONO mode.

Tape playback

Playback sound is distorted.	Contamination of the tape head. → Clean the head.
The AMS does not operate correctly.	- There is a noise in the space between selections. - A blank space is too short (less than four seconds). - FF is pressed immediately before the following selection. - REW is pressed immediately after the selection starts. - A long pause, or a passage of low frequencies or very low sound level is treated as a blank space.

53

Maintenance

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

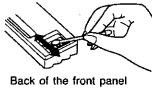
Warning
Use the specified amperage fuse. Use of a higher amperage fuse may cause serious damage.

Cleaning the Head and the Tape Path

Prolonged use may contaminate the tape head and the tape path. Contamination causes sound drop-outs in playback. Clean the tape head and the tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

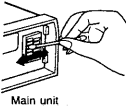
Cleaning the Connectors

The unit may not function properly if the connectors between the unit and the front panel get contaminated with dirt. In order to prevent this from happening, open up the front panel by pressing the RELEASE button then detach it and clean the connectors from time to time.



Back of the front panel

Clean the connectors with a cotton swab as illustrated. Be sure to clean them in the direction of the arrow.



Main unit

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Troubleshooting Guide

Disc Play

Playback sound is skipped.	Dusty or defective disc.
----------------------------	--------------------------

General

No sound	- Control the volume with the  or  button. - Set the fader control to the center position on the 2-speaker system.
----------	--

Front panel

Indications do not appear on the display window.	Contamination of the connectors between the unit and the front panel.	Remove the front panel and clean the connectors. See "Cleaning the Connectors" of "Maintenance" chapter for the details.
--	---	--

Error displays (when the optional Sony CD changers are connected)

The following indication will flash for about five seconds and an alarm sound will be heard.

Display	Cause	Solution
NO MAG	The disc magazine is not inserted in the CD changer.	Insert the disc magazine with discs into the CD changer.
NO DISC	No disc is inserted in the disc magazine.	Take out the disc magazine and insert the discs.
ERROR	The disc is dirty.	Clean the disc.
	The disc is inserted upside down.	Insert the disc correctly.
RESET	The CD changer cannot be operated because of some trouble.	Press the reset button of the unit.

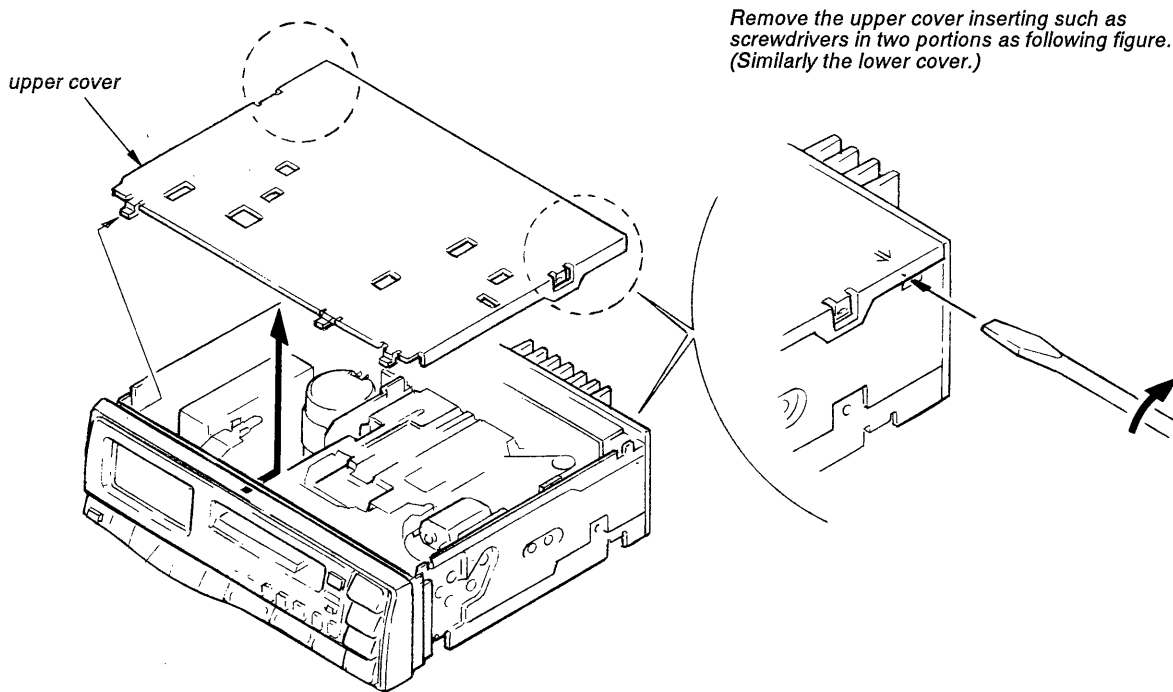
If the above mentioned solutions do not help to improve the situation, consult your nearest Sony dealer.

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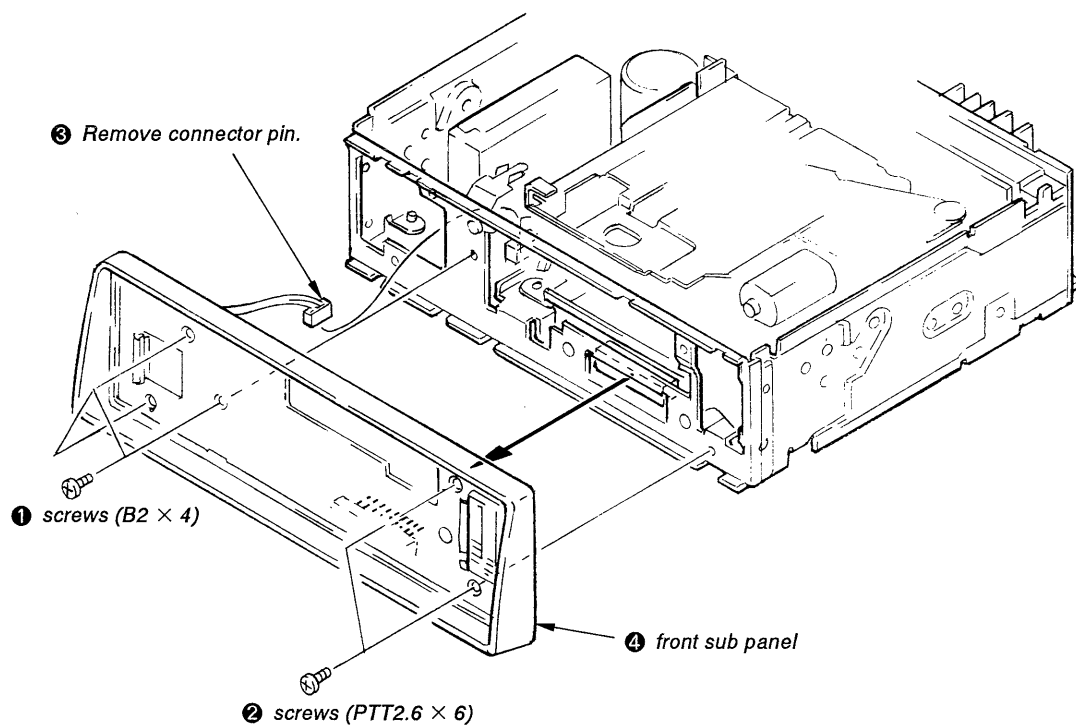
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

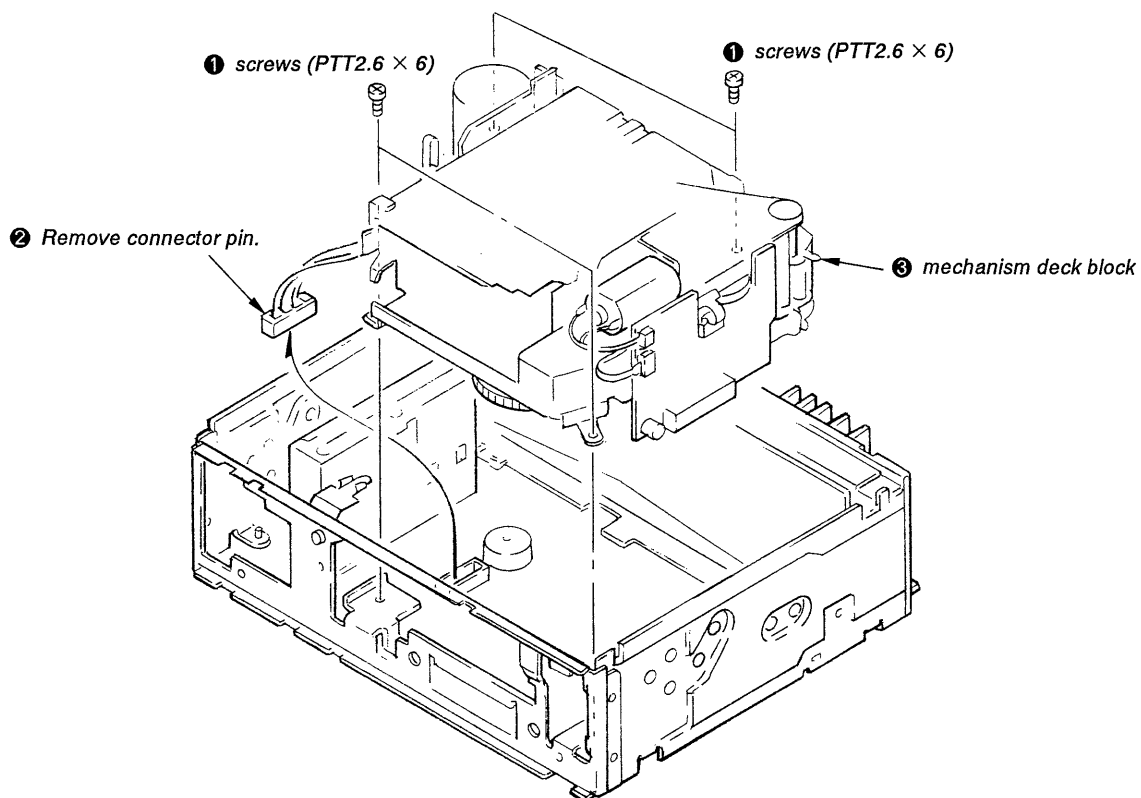
2-1. COVER



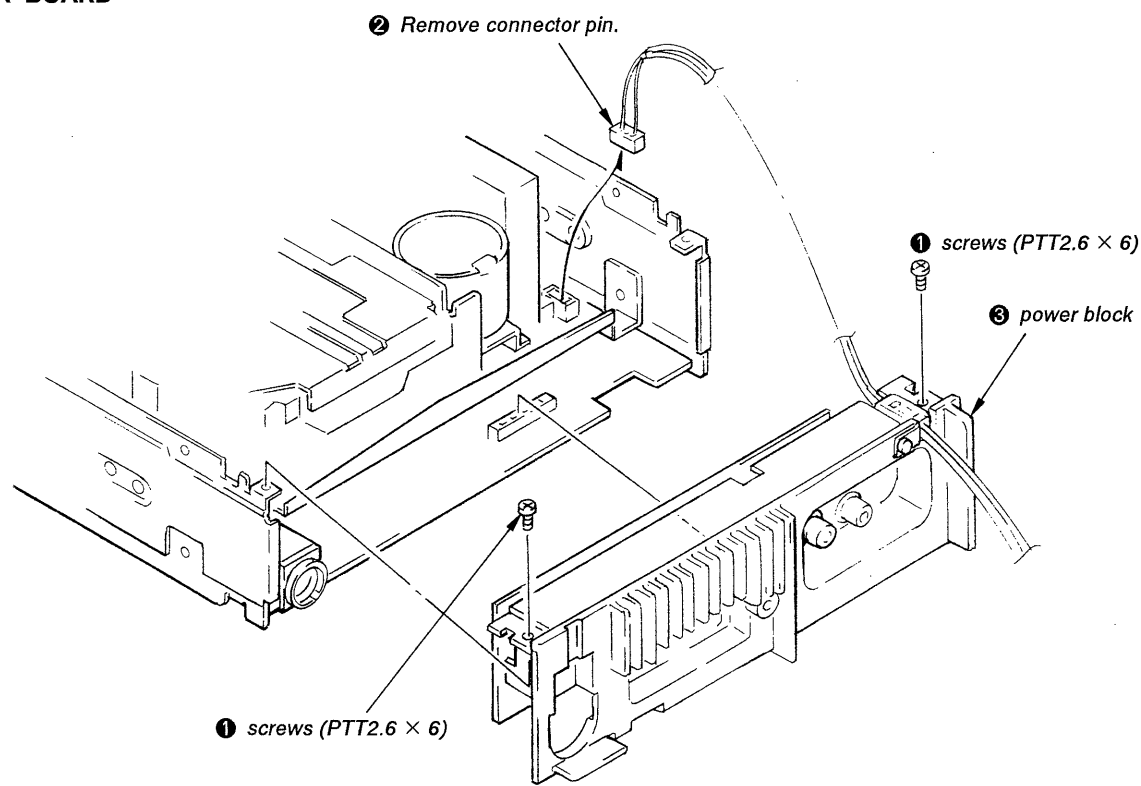
2-2. FRONT PANEL ASSY



2-3. MECHANISM DECK BLOCK



2-4. POWER BOARD



REVISED

SECTION 3

ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

PRECAUTION

- Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment:

PB head	Pinch roller
Idler	Rubber belt
Capstan	
- Demagnetize the PB head using a head demagnetizer.
- Be careful not to use a magnetized screwdriver.
- After the adjustment is completed, lock the adjustment parts using screws.
- Unless otherwise specified, make adjustments at the specified voltage (14.4 V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35 – 55 g•cm (0.49 – 0.76 oz•inch)
FWD Back Tension		1.5 – 4.5 g•cm (0.02 – 0.06 oz•inch)
REV	CQ-102RC	35 – 55 g•cm (0.49 – 0.76 oz•inch)
REV Back Tension		1.5 – 4.5 g•cm (0.02 – 0.06 oz•inch)
FF, REW	CQ-201B	80 – 170 g•cm (1.11 – 2.36 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100 g (more than 3.53 oz)
REV	CQ-403R	

3-2. TEST MODE

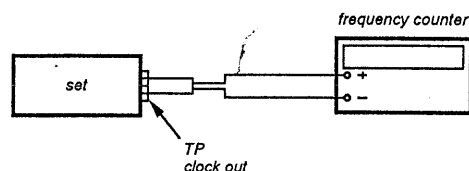
XR-U550/U660 series have the test mode function. In the test mode, FM Auto Scan/Stop Level, AM Auto Scan/Stop level and FM IF (0 V) adjustments can be performed easier than it in ordinary procedure.

Make the Test Mode.

- Set the "OFF" condition.
- Push **[7]** button.
- Push **[9]** button.
- Press **[1]** button for two seconds.
Then the display indicates 5 patterns and stops,
The test mode is set.

Microcomputer Clock Adjustment

Setting:



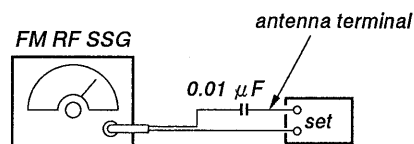
Procedure:

- Set to the test mode. (See left.)
- Adjust with CT501 for 16,384.0 ± 0.1 Hz reading on frequency counter.

FM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : FM

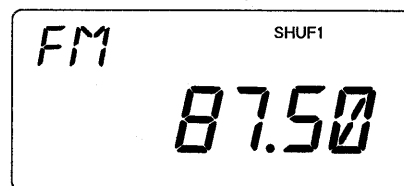


Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E/G)
Output level: 25 dB (18 μV) (Except RDS model)
22 dB (13 μV) (RDS model)
Mode: mono, unmodulated

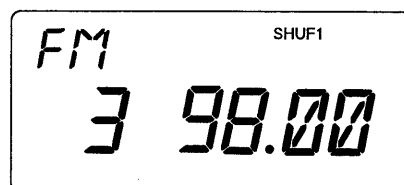
Procedure:

- Set to the test mode. (See page left.)
- Push the tuner button and set to FM.

Display window (EX.: AEP, UK, E, G model.
US, Canadian model; 87.90)



- Push the preset **[3]** button.



(EX.: AEP, UK, E, G model.
US, Canadian model; 87.9)

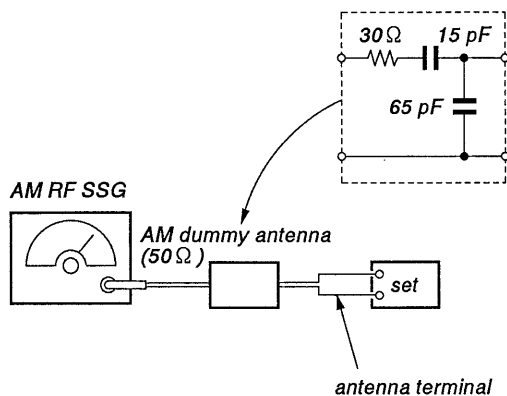
- Adjust with the volume on TU10 so that the "FM" indication turns to "FM0" indication on the display window.

AM (MW) Auto Scan/Stop Level Adjustment

Note: This adjustment should be made after FM auto scan stop level adjustment is completed.

Setting:

BAND switch : MW

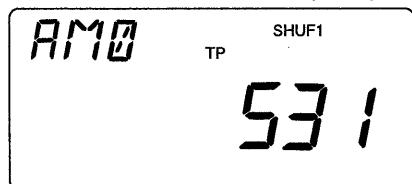


Frequency: 1,000 kHz (US/Canadian/E)
999 kHz (AEP/UK/E/G)
Output level: 30 dB μ V (31.8 μ V)

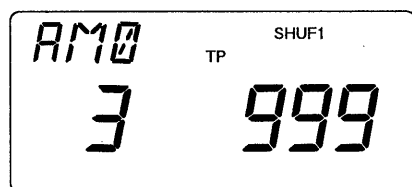
Procedure:

1. Set to the test mode. (See page 21.)
2. Push the tuner button and set to AM (MW).

Display window (EX.: 2 band model 9 kHz step when 10 kHz step; 530)



3. Push the preset **3** button.



(EX.: 2 band model 9 kHz step, when 10 kHz step; 1000)

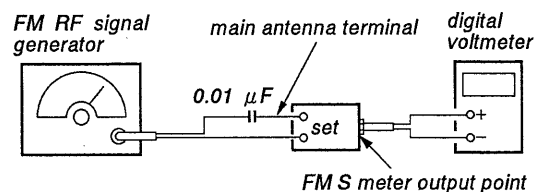
4. Adjust with the volume on TU10 so that the "AM (or MW)" indication turns to "AM0 (or MW0)" indication on the display window.

FM IF (0 V) Adjustment

(): XR-550RDS/551RDS/660RDS/661RDS

Setting:

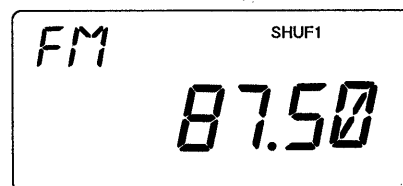
BAND switch : FM
FM DIVERSITY switch: OFF
antenna select switch: MAIN



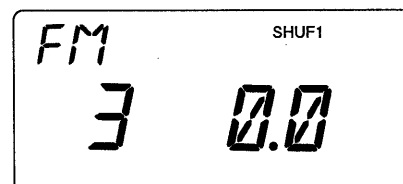
Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E)
Output level: 70 dB (3.2 mV) (35 dB (56.2 μ V))
Mode: mono
Modulation: 1 kHz, 75 kHz deviation

1. Set to the test mode. (See page 21.)
2. Push the tuner button and set to FM.

Display window (EX.: AEP, UK, E, G model.
US, Canadian model; 87.90)



3. Push the preset **10** button.



4. Adjust with RV4 so that the "0.0" indication turns to "0.6" indication on the display window.

3-3. ELECTRICAL ADJUSTMENTS

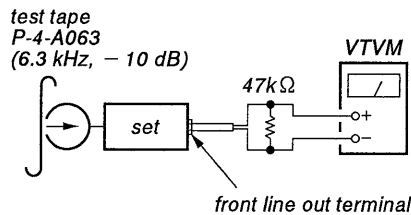
See the adjusting location and measurement location from on page 26 for the adjustment.

DECK SECTION

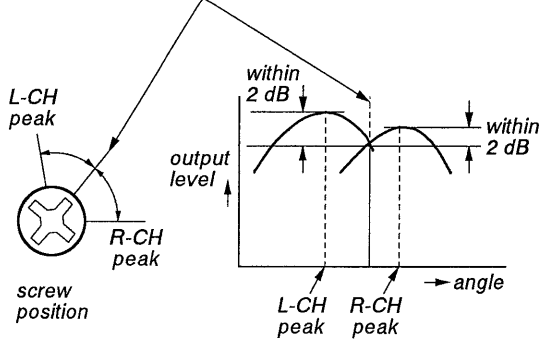
PB Head Azimuth Adjustment

Procedure:

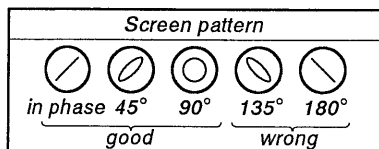
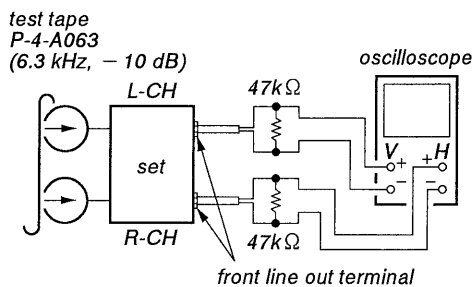
1. Put the set into the FWD PB mode.



2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2 dB.



3. Check the phase in the PB mode.

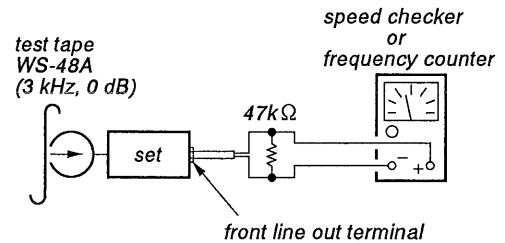


4. Repeat the above adjustment for the REV PB mode.

Capstan Motor Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.



Specification: Constant speed

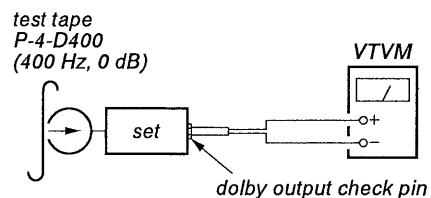
Speed checker	Frequency counter
- 1.5 to +1.5%	2,955 to 3,045 Hz

Adjustment Location: Capstan Motor Volume

DOLBY Level Adjustment

Setting:

DOLBY NR switch: OFF
VOLUME control: Maximum
BALANCE control: Mechanical Center
BASS control: Mechanical Center
TREBLE control: Mechanical Center



Procedure:

1. Put the set into the FWD PB mode.
2. Adjust RV101 (L-CH) and RV201 (R-CH) so that VTVM reading is -6 ± 0.2 dB (0.38 to 0.39 V).

Adjustment Location: EQ board

TUNER SECTION

Cautions during repair

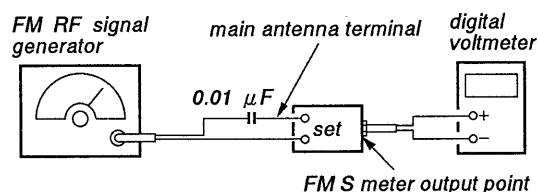
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM IF (0 V) Adjustment

(): XR-550RDS/551RDS/660RDS/661RDS

Setting:

BAND switch : FM
FM DIVERSITY switch: OFF
antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E/G)
Output level: 70 dB (3.2 mV) (35 dB (56.2 μV))
Mode: mono
Modulation: 1 kHz, 75 kHz deviation

Procedure:

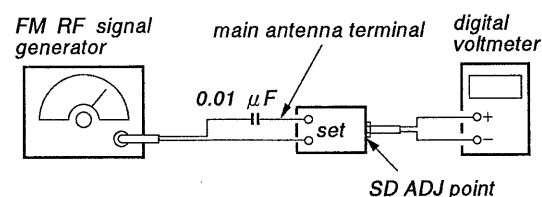
1. Tune the set to 98.0 MHz.
2. Adjust RV4 for 4.5 ± 0.1 V (adjustment value ± 0.1 V) reading on the digital voltmeter.

Adjustment Location: MAIN board

FM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : FM
FM DIVERSITY switch: OFF
antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E/G)
Output level: 22 dB (12.6 μV)
Mode: mono
Modulation: 1 kHz, 75 kHz deviation

Procedure:

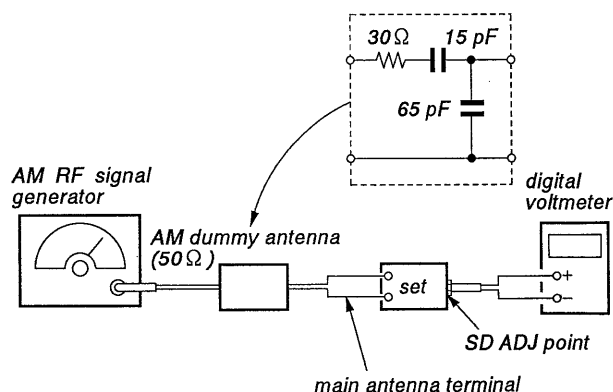
1. Tune the set to 98.0 (97.9) MHz.
2. Adjust trimmer resistor for FM of inside FM/AM tuner for changes from low to high reading on the digital voltmeter.
3. When the FM RF signal generator output level is 24 dB (15.8 μV), check that the auto scan stopped.

Adjustment Location: MAIN board

AM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : MW
FM DIVERSITY switch: OFF
antenna select switch: MAIN



Carrier frequency: 1,000 kHz (US/Canadian/E)
999 kHz (AEP/UK/E/G)
30% amplitude modulation by 400 Hz signal
Output level: 30 dB (31.6 μV)

Procedure:

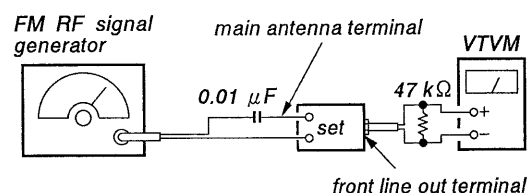
1. Tune the set to 999 (1,000) kHz.
2. Adjust trimmer resistor of inside the AM tuner unit for changes from low to high reading on the digital voltmeter.
3. When the AM RF signal generator output level is 48 dB (251.2 μV), check that the auto scan stopped.

Adjustment Location: AM tuner unit

FM Stereo Separation Adjustment

Setting:

BAND switch : FM
FM DIVERSITY switch: OFF
antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E/G)
Output level: 70 dB (3.2 mV)
Mode: stereo
Modulation: main; 1 kHz, 33.75 kHz deviation (45%)
sub; 1 kHz, 33.75 kHz deviation (45%)
19 kHz pilot; 7.5 kHz deviation (10%)

Procedure:

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ [Ⓐ] Adjust RV2 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ [Ⓒ] Adjust RV2 for minimum reading.

L-CH Stereo separation: Ⓐ – Ⓑ

R-CH Stereo separation: Ⓒ – Ⓓ

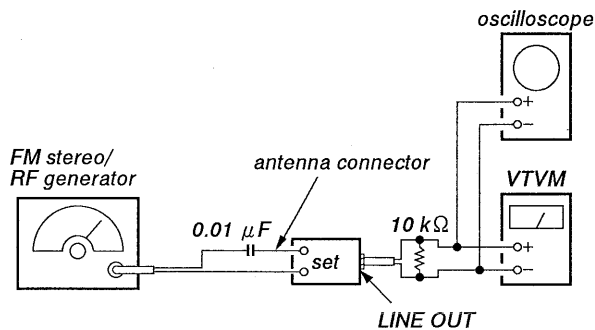
The separations of both channels should be equal.

Adjustment Location: MAIN board

FM Carrier Leak Adjustment

Setting:

BAND switch : FM
FM DIVERSITY switch: OFF
antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)

98.0 MHz (AEP/UK/E/G)

Output level: 60 dB μ V (1 mV)

Modulation: main; 1 kHz, 33.75 kHz deviation
sub; 1 kHz, 33.75 kHz deviation
19 kHz pilot; 7.5 kHz deviation

Procedure:

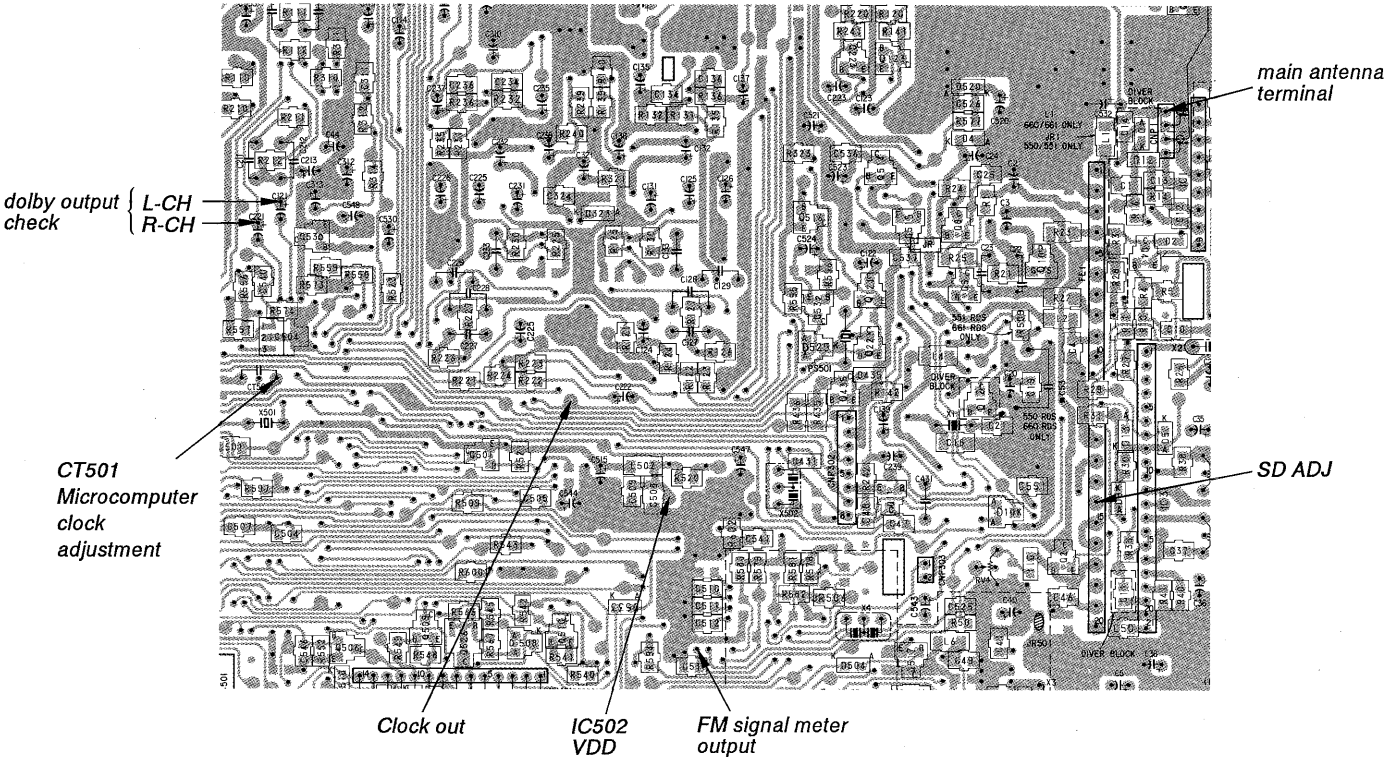
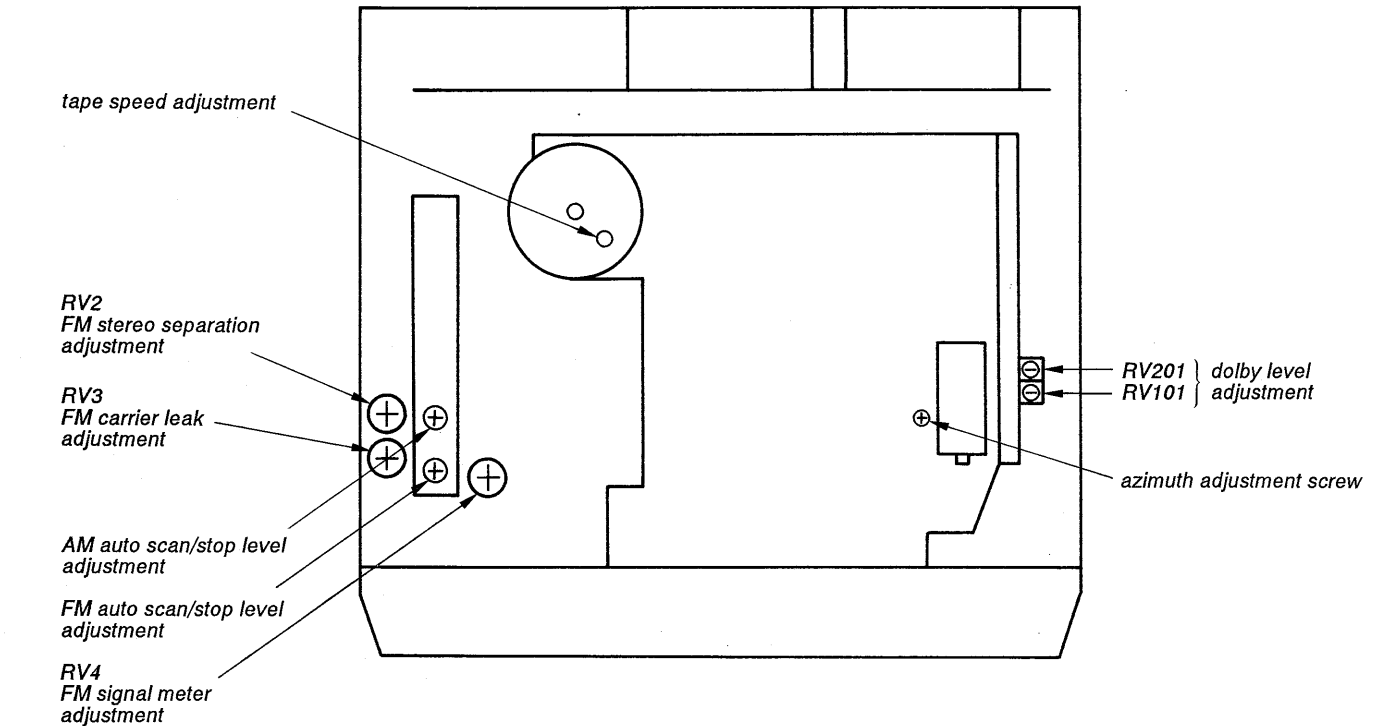
1. Check the waveform on the oscilloscope screen becomes as follows when turning RV3.



2. Set the modulation 19 kHz pilot only.
3. Adjust with RV3 so that the 19 kHz signal becomes minimum on both channels L and R.

Adjustment Location:

— Top View —



SECTION 4

DIAGRAMS

4-1. PIN DESCRIPTIONS

Master Microcomputer IC501 (μ PD75116GF-F41-3BE)

Pin No.	Name	I/O	Description																																													
63	POS 3	I	Mechanism Deck Position Detection pin. (See the table below.) *(With tape rotation in normal direction)																																													
64	POS 2	I																																														
1	POS 1	I																																														
2	POS 0	I																																														
			<table><tr><td></td><td>EJECT</td><td>STOP</td><td>↔</td><td>FF</td><td>↔</td><td>REW</td><td>↔</td><td>PLAY</td></tr><tr><td>POS 0</td><td>L</td><td>L</td><td>L</td><td>H</td><td>H</td><td>H</td><td>H</td><td>H</td></tr><tr><td>POS 1</td><td>H</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>H</td><td>H</td></tr><tr><td>POS 2</td><td>H</td><td>H</td><td>H</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td></tr><tr><td>POS 3</td><td>L</td><td>H</td><td>H</td><td>H</td><td>H</td><td>H</td><td>L</td><td>L</td></tr></table> H : High input, L : Low input		EJECT	STOP	↔	FF	↔	REW	↔	PLAY	POS 0	L	L	L	H	H	H	H	H	POS 1	H	H	L	L	L	H	H	H	POS 2	H	H	H	H	L	L	L	H	POS 3	L	H	H	H	H	H	L	L
	EJECT	STOP	↔	FF	↔	REW	↔	PLAY																																								
POS 0	L	L	L	H	H	H	H	H																																								
POS 1	H	H	L	L	L	H	H	H																																								
POS 2	H	H	H	H	L	L	L	H																																								
POS 3	L	H	H	H	H	H	L	L																																								
3	LINK OFF	O	Not used.																																													
4	AMP ON	O	Not used.																																													
5	POWER-ON	O	Power ON/OFF Output pin. Set this output "High" to turn power on. Set it "Low" to turn all power off.																																													
6	ACC-ON	O	Button Illumination Power ON/OFF Output pin. Set this output "High" to turn the power on.																																													
7	RESET	I	Reset pin.																																													
8	X2	—	Connection pin for System Clock Oscillation. 4.19MHz connection.																																													
9	X1	I																																														
10	DM CLOSE	O	Not used.																																													
11	DM OPEN	O																																														
12	SYSTEM RESET	O	Pin which resets all of slave microcomputers that are connected and are communicating on the UNILINK BUS. Switching this output from "Low" to "High" level causes resetting. Usually it is kept "High".																																													
13	SYNC	O	Pin which outputs the pulse for determining timing of communication to data line. (UNILINK BUS interface SYNC pin)																																													
14	MUTE	O	Output pin used to enable Audio Muting. This output is kept "High" during audio muting.																																													
15	CLK VOL	O	Pin for Clock Output to the electronics VOL IC (IC 321: LC7537AN).																																													
16	DATA VOL	O	Pin for Data Output to the electronics VOL IC.																																													
17	CE VOL	O	Pin for CE Output to the electronics VOL IC. This output is used as the latch signal to send data.																																													
18	NOSE	I	Initialization pin which determines whether the nose is removed or not. When this input is "High", there are no nose removal failure caution alarm, no cassette EJECT and no nose open function (by means of pressing OPEN button for two sec).																																													
19	B/C (INT)	I	Initialization pin which determines whether Dolby B NR only or Dolby B and C NR. When "Low", this input sets both B and C. When "High", it sets B only.																																													

Pin No.	Name	I/O	Description									
20	CLOCK	I	Initialization pin which determines whether the internal clock is present or not. When "Low", this input initializes the system with the clock present.									
21	POWER SELECT	I	Power Select switch (initialization). Set this input "Low" to select Power select OFF setting (to cope with cars without accessory position).									
22	PL	O	MD Plunger Control pin.									
23	CM	O	MD Capstan Motor Control pin.									
24	LM-	O	} MD Loading Motor Control pin									
25	LM+	O										
				<table><tr><td>LM- LM+</td><td>High</td><td>Low</td></tr><tr><td>High</td><td>Brake</td><td>Loading Direction</td></tr><tr><td>Low</td><td>Eject Direction</td><td>Stopped</td></tr></table>	LM- LM+	High	Low	High	Brake	Loading Direction	Low	Eject Direction
LM- LM+	High	Low										
High	Brake	Loading Direction										
Low	Eject Direction	Stopped										
26	Vss	—	Vss pin.									
27	DP 0	I	} Not used. Pullup H.									
28	DP 1	I										
29	NSW	I	Nose Presence Detection pin. When "Low", this input indicates that the nose is removed.									
30	CSW	I	Cassette Tape Presence Detection pin. When "High", this input indicates that cassette tape is present.									
31	REEL 1	I	Cassette Tape Rotation Detection pin (this input indicates Take up side when tape is being rotated in normal direction).									
32	REEL 2	I	Cassette Tape Rotation Detection pin (this input indicates Supply side when tape is being rotated in normal direction).									
33	F/R	I	Cassette Tape Run Direction Detection pin. When "Low", this input indicates REVERSE.									
34	——	—	Not used. (Connected to GND.)									
35	——	—	Not used. (Connected to GND.)									
36	——	—	Not used. (Connected to GND.)									
37	CLK OUT	O	Serial Communication Clock Output pin. (UNILINK BUS Interface Clock Output pin)									
38	BUS ON	O	UNILINK BUS Interface Bus ON Output terminal. Set this output "Low" to enable communication on the bus.									
39	KEY RESET	O	Pin which resets the KEY DISPLAY microcomputer (IC 702).									
40	BEEP	O	BEEP Output pin.									
41	SI	I	Serves as both Serial Data Input pin and Detection pin for Communication Request from slave. (UNILINK BUS Interface Data Input pin)									

Pin No.	Name	I/O	Description
42	SO	O	Serial Data Output pin. (UNILINK BUS Interface Data Output pin)
43	CLK IN	I	Serial Communication Clock Input pin.
44	BU CHECK	I	Power Voltage Detection pin.
45	ACC CHECK	I	Accessory Voltage Detection pin. When "High", this input indicates ACC OFF.
46	TEL MUTE	I	Pins which detects a telephone call. This input becomes "Low" to mute -20dB audio signal. It becomes "High" to return the signal to its original VOL level.
47	—	—	Not used. (Connected to GND.)
48	TV/TV1,2	I	Intialization pin for the number of bands (preset count) for TV when the Hide-away TV tuner is connected. When "Low", this input sets 1 band (preset count to 10). When "High", it sets 2 bands for TV1,TV2 (preset count to 20).
49	KEY 5V	O	Power Control pin for the KEY DISPALY microcomputer. Set this output "Low" to turn the power on.
50	AUX ON	O	This output is "Low" when supplied as an external input of UNILINK IN AUDIO to CD, TV, etc. It supplies high impedance to other destinations.
51	D ON	O	This output is "Low" when sound is being produced from cassette tape. Ohterwise, it supplies high impedance.
52	—	—	Not used.
53	—	—	Not used.
54	ANT ON	O	This output supplies high impedance when the tuner or TV is on. It is "Low" when any other source is on.
55	—	—	Not used.
56	—	—	Not used.
57	NC	—	Connected to VDD.
58	V _{DD}	—	V _{DD} pin.
59	B/C	O	This output is "High" when Dolby B NR is on. It is "Low" output when C NR is on.
60	DNR ON	O	This output is "Low" when Dolby NR is on. It is "High" when Dolby NR is off.
61	AMS IN	I	Detection pin which determines whether tape sound is present or not. This input is "Low" when tape sound is present.
62	MTL	I	Tape NORMAL/METAL Detection pin. This input is "Low" when normal tape is used.

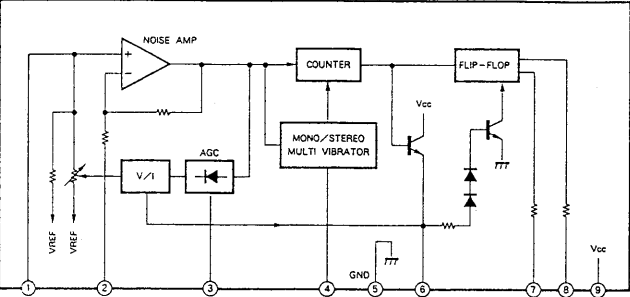
Key Display Microcomputer IC702 (μ PD75008GB-676-3B4)

Pin No.	Name	I/O	Description
44	KI7	I	KEY SCAN Input pin.
1	KI6	I	
2	KI5	I	
3	KI4	I	
4	KI3	I	
5	KI2	I	
6	KI1	I	
7	KI0	I	
8	KO3	O	KEY SCAN Output pin.
9	KO2	O	
10	KO1	O	
11	KO0	O	
12	NC	—	(Connected to VDD.)
13	—	—	Not used.
14	—	—	
15	—	—	
16	—	—	
17	V _{ss}	—	V _{ss} pin.
18	XT1	—	(Connected to GND.)
19	XT2	—	Not used.
20	RESET	I	Reset pin.
21	X1	I	Connection pin for System Clock oscillation. 4.19MHz connection.
22	X2	—	
23	LCD CLK	O	Pin for Clock Output to LCD DRIVER IC (IC 703: TC9240F)
24	LCD DATA	O	Pin for Data Output to LCD DRIVER IC.
25	LCD CE	O	Pin for CE Output to LCD DRIVER IC. This output is used as the latch signal to send data.
26	LCD INH	O	Pin for INH Output to LCD DRIVER IC.
27	LINK OFF	O	Not used.
28	REQ	O	UNILINK BUS Interface Request pin. This pin is "High" to request communication from the master microcomputer (IC 501).
29	DATA IN	I	Serves as both Serial Data Input pin and Detection pin for Communication Request from slave. (UNILINK BUS Interface Data Input pin)
30	DATA OUT	O	Serial Data Output pin. (UNILINK BUS Interface Data Output pin)
31	CLK IN	I	Serial Communication Clock Input pin. (UNILINK BUS Interface Clock Input pin)
32	BU CHECK	I	Power Voltage Detection pin.
33	—	—	(Connected to GND.)
34	NC	—	(Connected to VDD.)
35	TV CONT	I	Not used.
36	BUS ON	I	UNILINK BUS Interface Bus ON Terminal. When this output is "Low", communication on the bus is enabled.

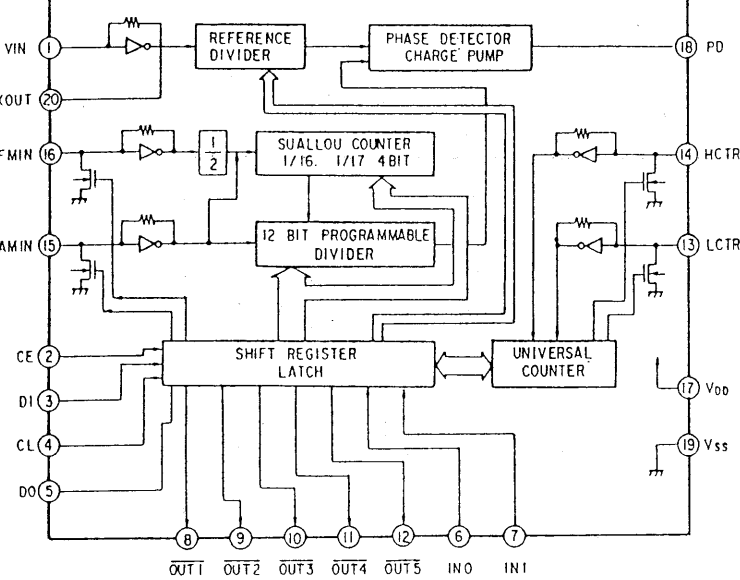
Pin No.	Name	I/O	Description
37	SIRCS	I	Infrared Remote Control Input pin.
38	NC	—	(Connected to V _{DD} .)
39	V _{DD}	—	V _{DD} pin.
40	LCD ON	O	LCD Back Illumination and LCD DRIVER IC Power Control pin.
41	ACC-ON ILL	O	Button Illumination Output for function keys. This output is "High" when ACC is ON and it is "Low" when ACC is OFF (with Power Select switch selected ON).
42	P-ON ILL	O	Button Illumination Output pin for buttons other than function keys. This output is "High" when power is turned on and it is "Low" when power is turned off.
43	COLOR	O	Illumination Color Select Output pin. Set this output "High" to select Green. Set it "Low" to select Amber.

• IC Block Diagrams

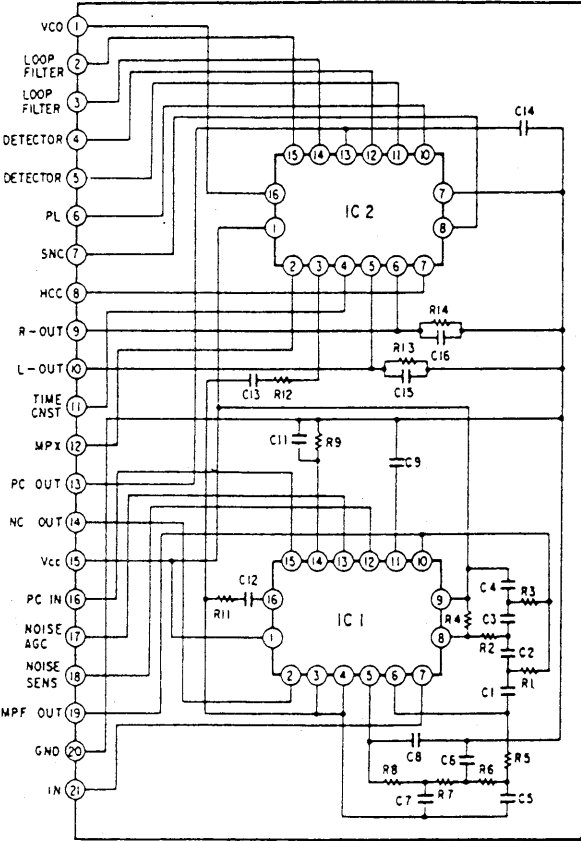
IC1 LA1060



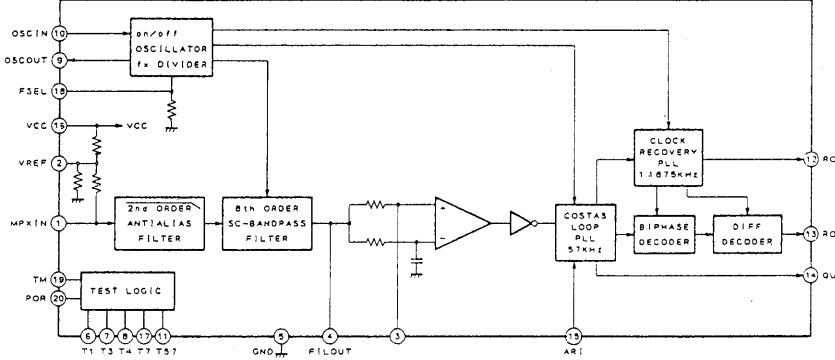
IC2 LC7216M



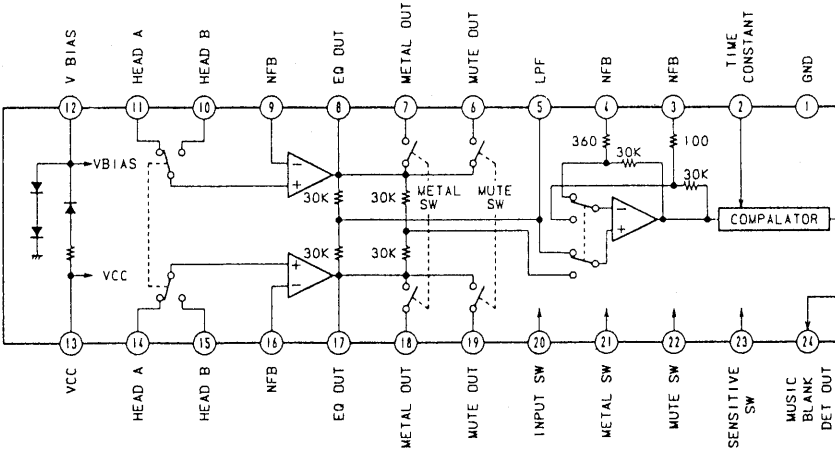
IC3 STK-3400



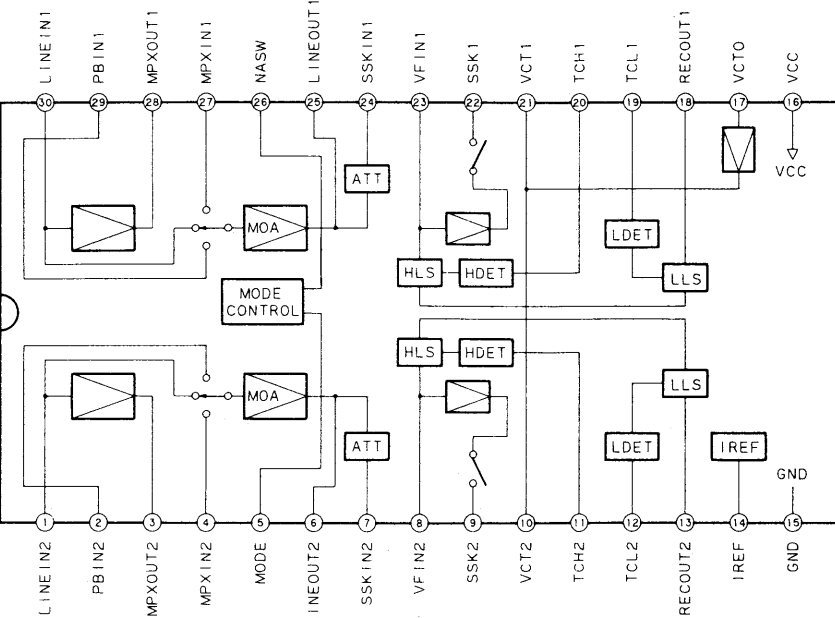
IC4 TDA7330



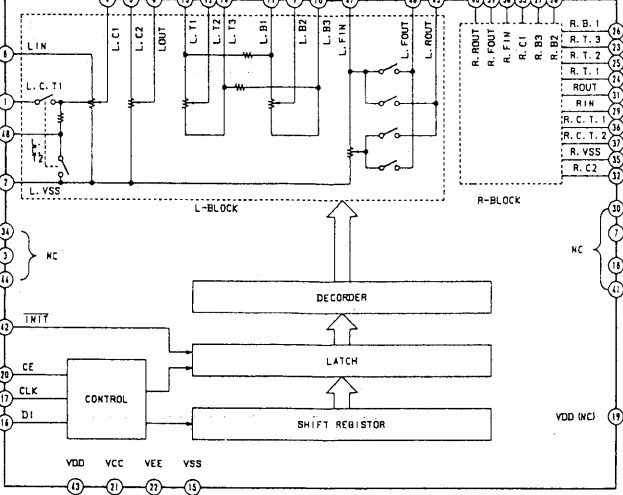
IC301 BA3430FS



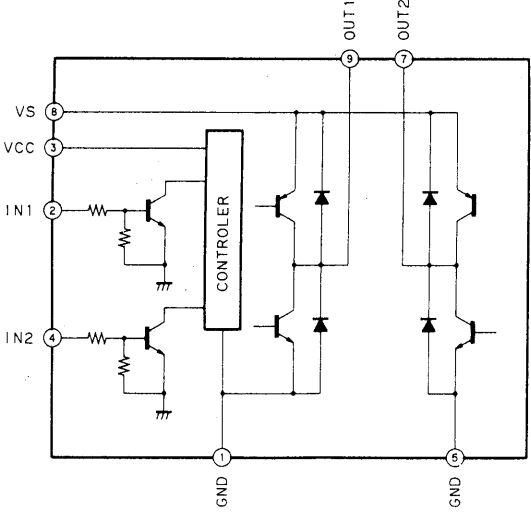
IC311 CXA1332M



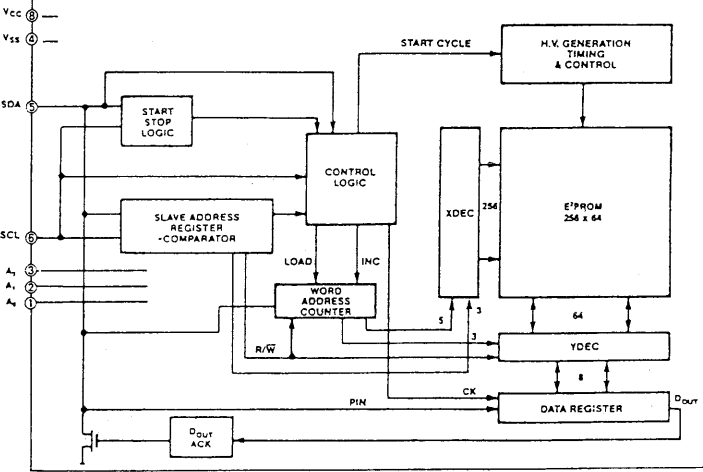
IC321 LC7537AN



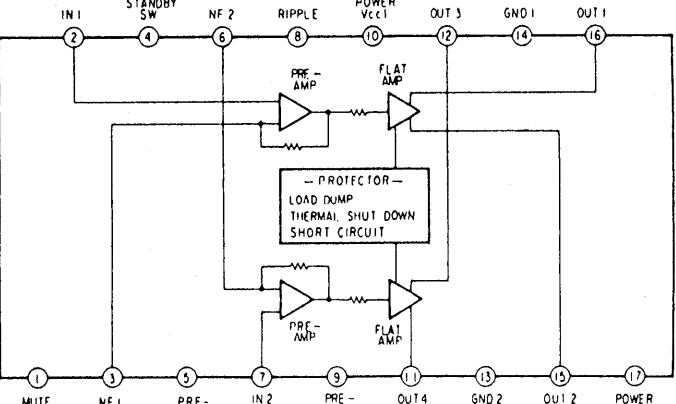
IC431 LB1638



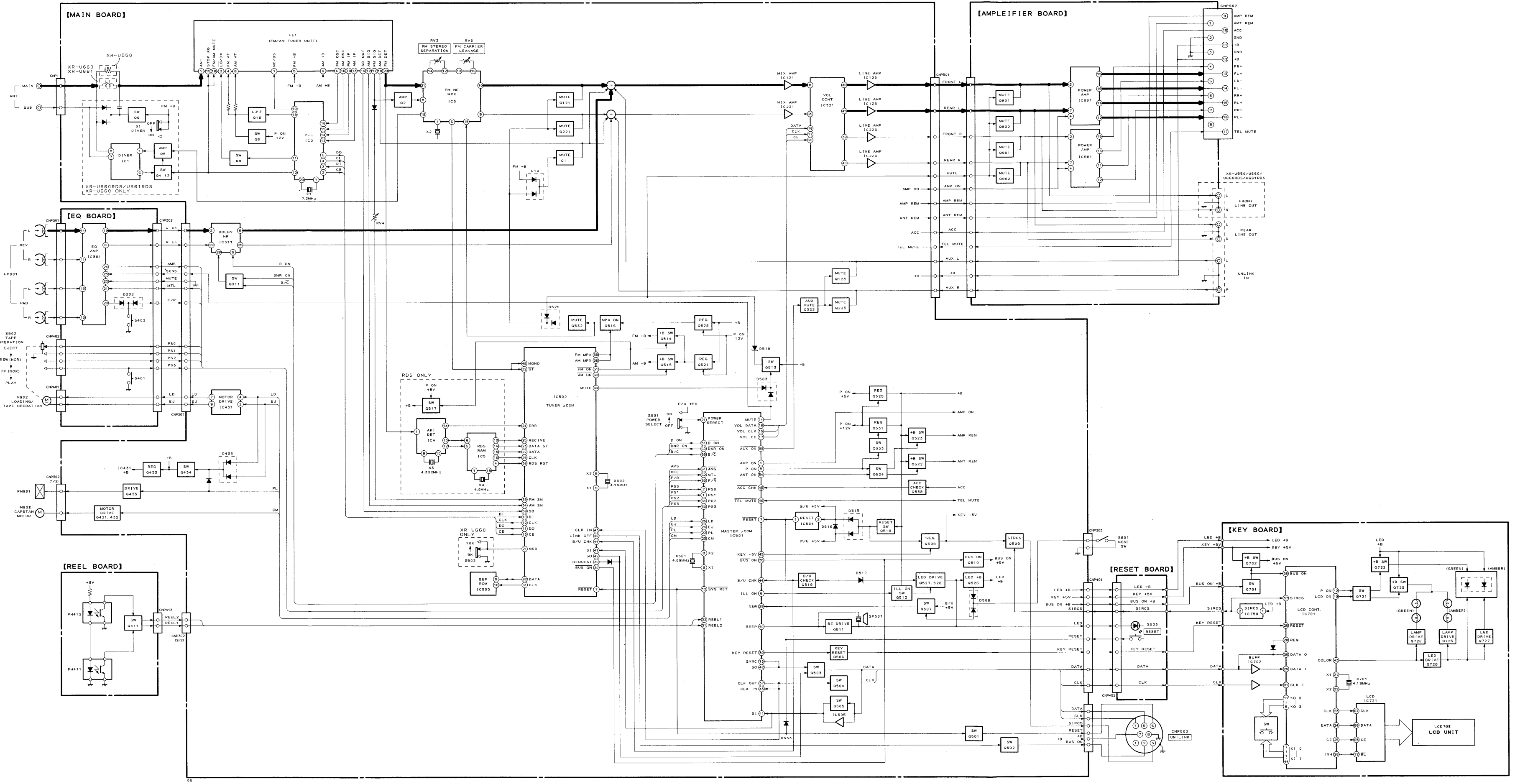
IC503 X24C16SI



IC801, 901 TA8215H

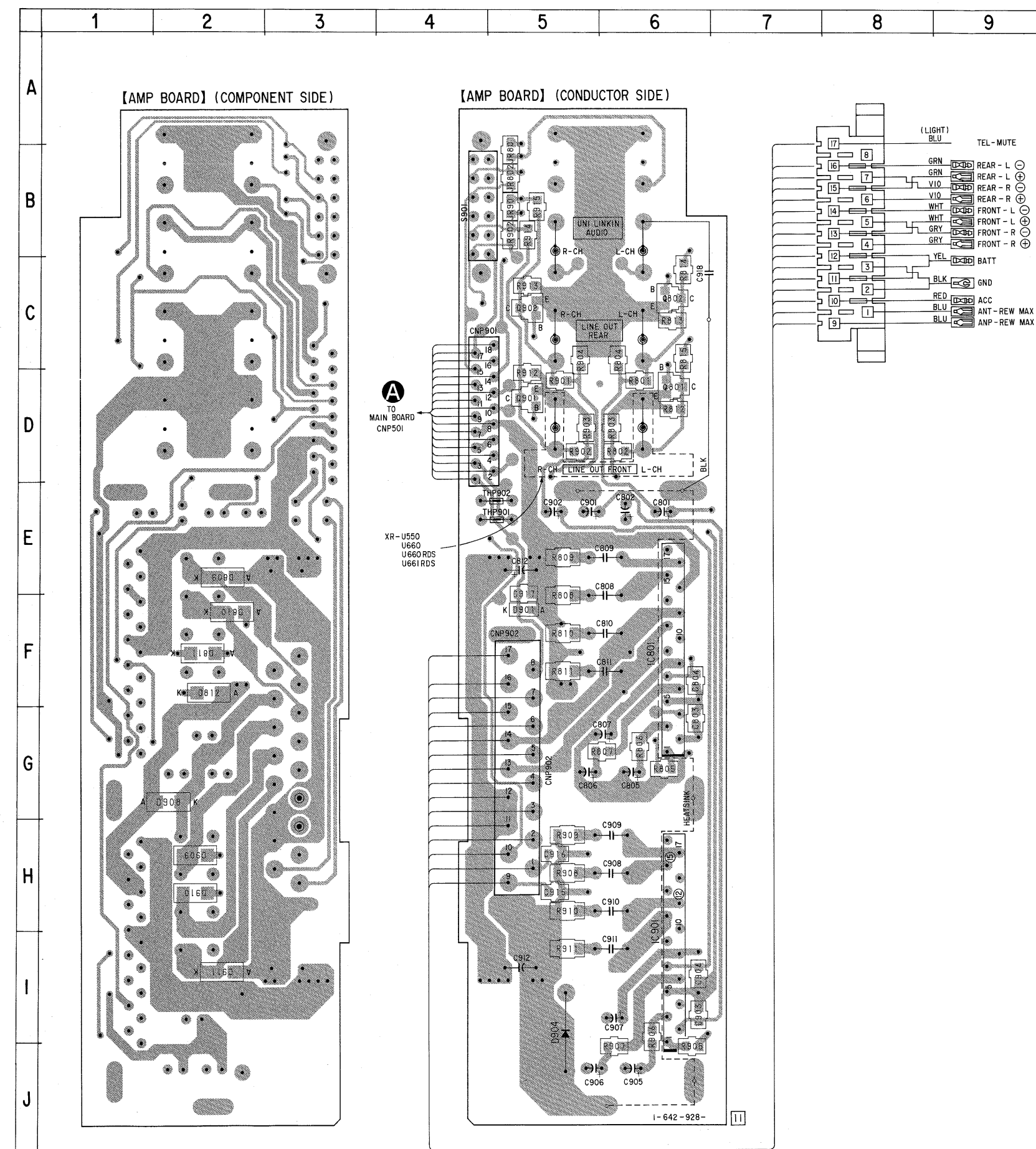
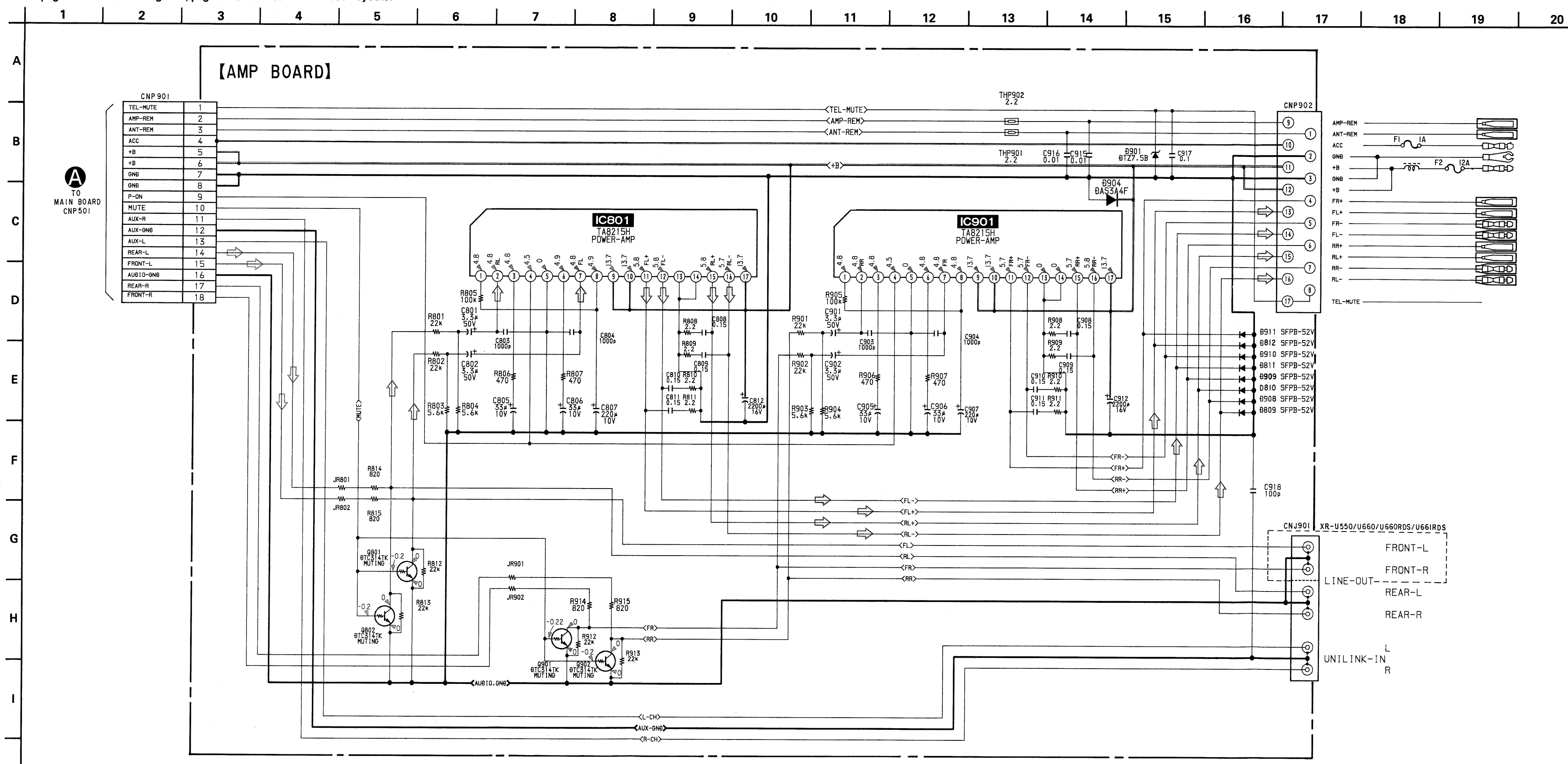


4-2. BLOCK DIAGRAM



4-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM (AMP SECTION)

• See page 31 for IC Block Diagrams, page 51 for Semiconductor Lead Layouts.



• Semiconductor Location

Ref. No.	Location
D809	E-2
D810	F-2
D811	F-2
D812	F-2
D908	G-2
D909	H-2
D810	H-2
D811	I-2
IC801	F-6
IC901	I-6
Q801	D-6
Q802	C-6
Q901	D-5
Q902	C-5

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- % : indicates tolerance.
- — : B + Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BAT and ACC terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : PB
- () : STOP
- Signal path.
- □ : PB

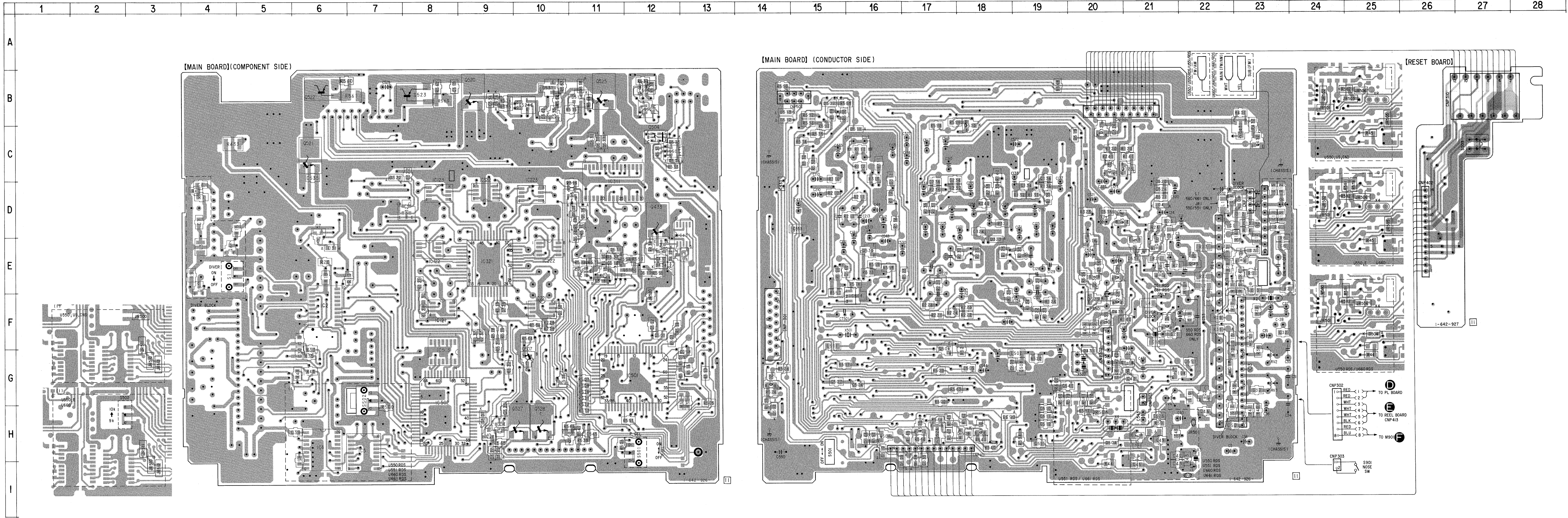
Note on Printed Wiring Board:

- ○ : parts extracted from the component side.
 - ● : Through hole.
 - □ : Pattern from the side which enables seeing.
- (The other layers' patterns are not indicated.)

Caution:

- Pattern face side: Parts on the pattern face side seen from the (Conductor Side)
- Parts face side: Parts on the parts face side seen from the (Component Side)

4-4. PRINTED WIRING BOARDS (MAIN SECTION) • See page 51 for Semiconductor Lead Layouts.



• Semiconductor Location

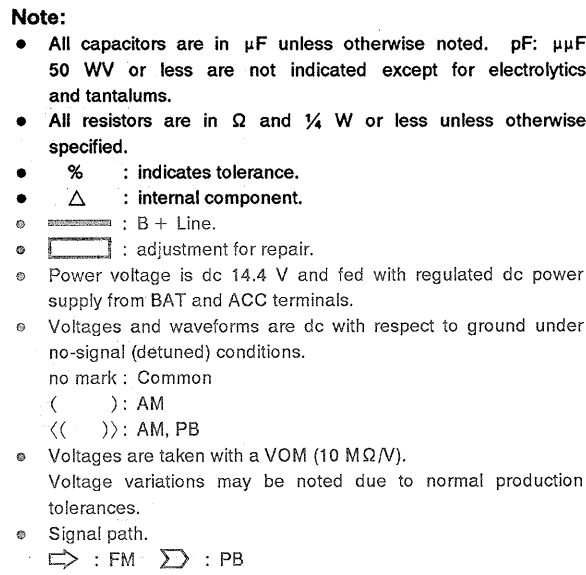
Ref. No.	Location	Ref. No.	Location
D1	D-23	IC312	E-9
D2	E-23	IC322	D-9
D3	E-6	IC431	E-12
D4	D-21	IC501	G-11
D5	F-23	IC502	H-8
D9	G-22	IC503	G-8
D10	G-21	IC504	F-16
D11	G-22	IC505	B-12
D12	D-23		
D13	F-22	Q2	G-22
D321	C-20	Q4	E-23
D322	C-7	Q5	E-4
D323	E-18	Q6	E-4
D431	G-20	Q7	D-6
D432	E-12	Q8	E-21
D433	E-12	Q9	E-21
D434	E-12	Q10	E-22
D435	F-20	Q11	G-21
D501	H-9	Q12	F-21
D502	H-14	Q121	E-20
D503	G-10	Q123	C-20
D504	H-20	Q221	F-20
D505	C-12	Q223	C-20
D506	C-12	Q311	D-11
D507	B-15	Q322	D-7
D508	H-18	Q431	C-23
D509	H-16	Q432	C-23
D510	H-16	Q433	D-12
D511	C-16	Q434	E-12
D512	B-14	Q501	G-17
D513	B-14	Q502	G-14
D514	E-11	Q503	C-12
D515	E-11	Q504	C-12
D516	E-11	Q505	B-12
D517	E-12	Q506	H-16
D518	B-11	Q507	G-10
D519	C-20	Q508	H-10
D520	D-21	Q509	H-17
D521	C-11	Q510	H-18
D522	H-9	Q511	H-9
D523	D-11	Q512	H-9
D524	D-11	Q513	B-11
D525	D-11	Q514	D-20
D526	B-9	Q515	E-21
D527	C-11	Q516	E-20
D528	H-17	Q517	H-21
D530	C-19	Q518	E-11
D531	E-11	Q519	E-11
D532	E-11	Q520	B-9
D533	H-18	Q521	C-6
		Q522	B-6
IC2	F-6	Q523	B-8
IC4	H-6	Q524	B-10
IC5	H-7	Q525	B-11
IC121	F-8	Q526	H-17
IC122	E-8	Q527	H-10
IC123	D-8	Q528	H-10
IC221	F-10	Q530	E-16
IC222	E-10	Q531	B-10
IC223	D-10	Q532	E-20
IC311	D-11	Q533	B-10

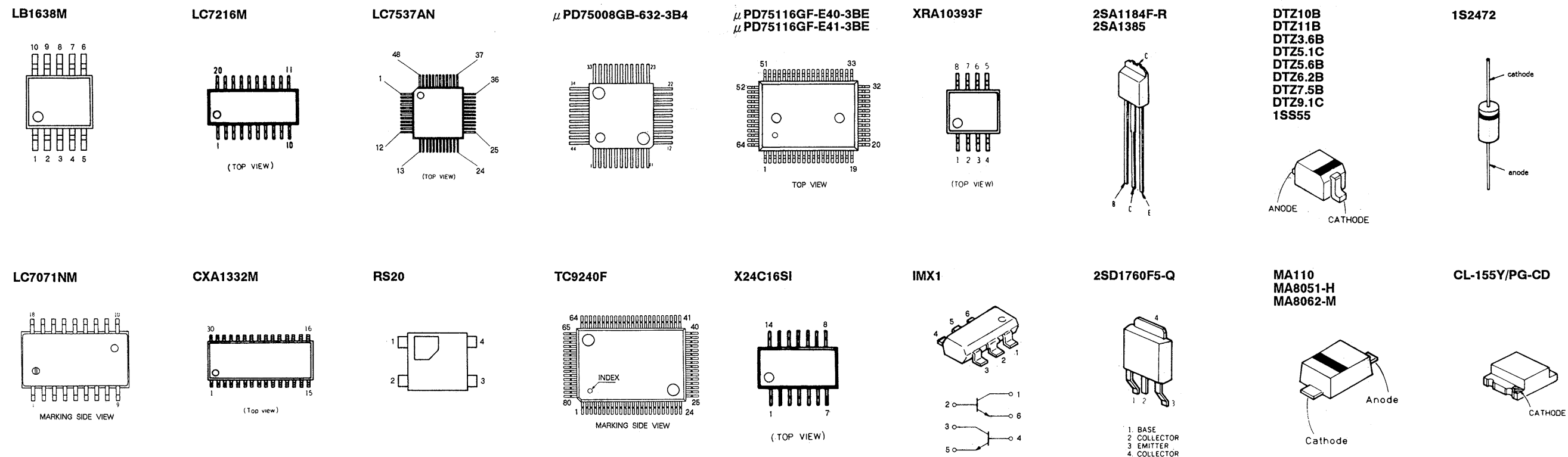
Note:
• ○ : parts extracted from the component side.
• ● : Through hole.
• : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
Parts face side: Parts on the parts face side seen from the (Component Side) parts face are indicated.

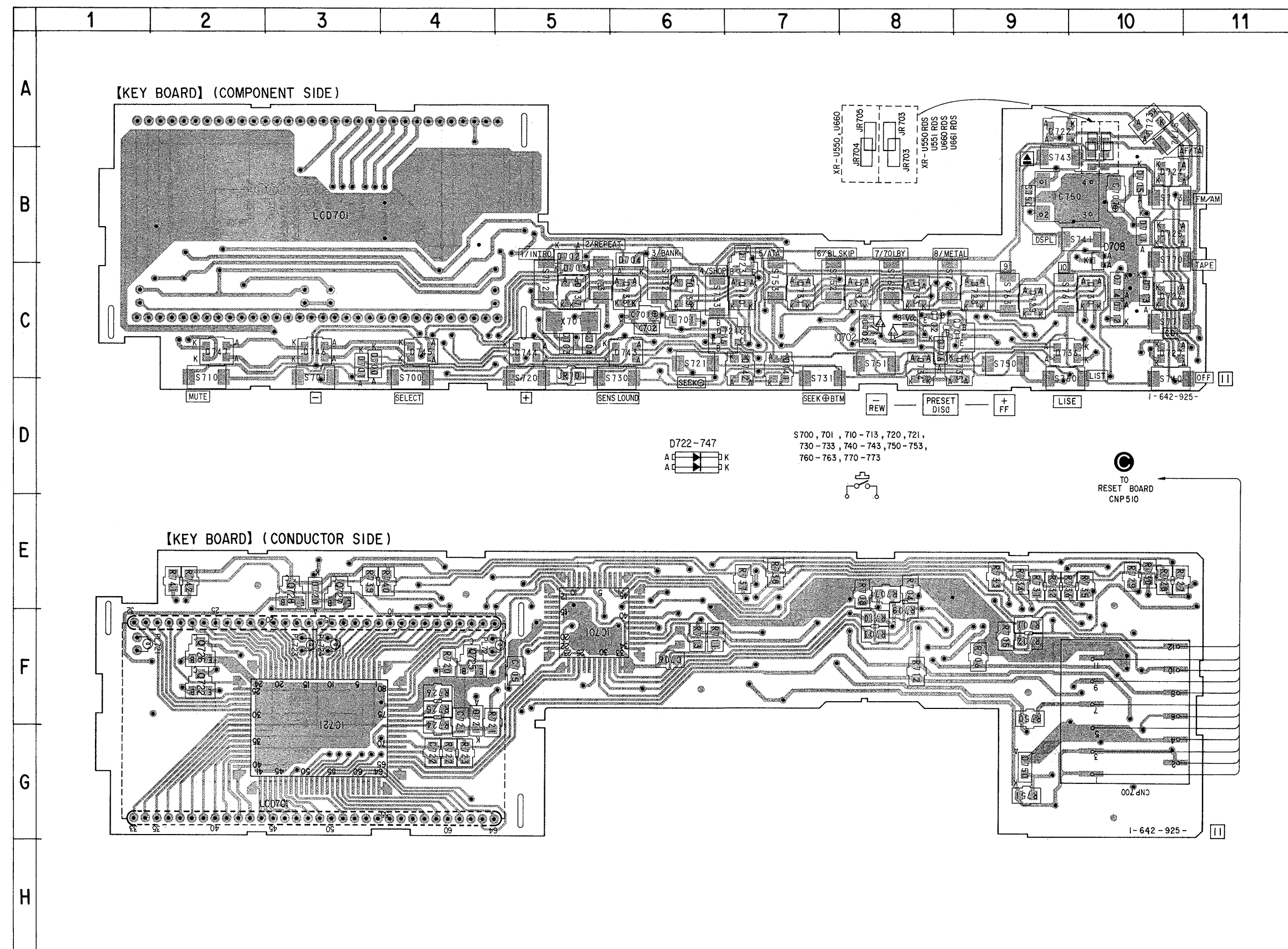
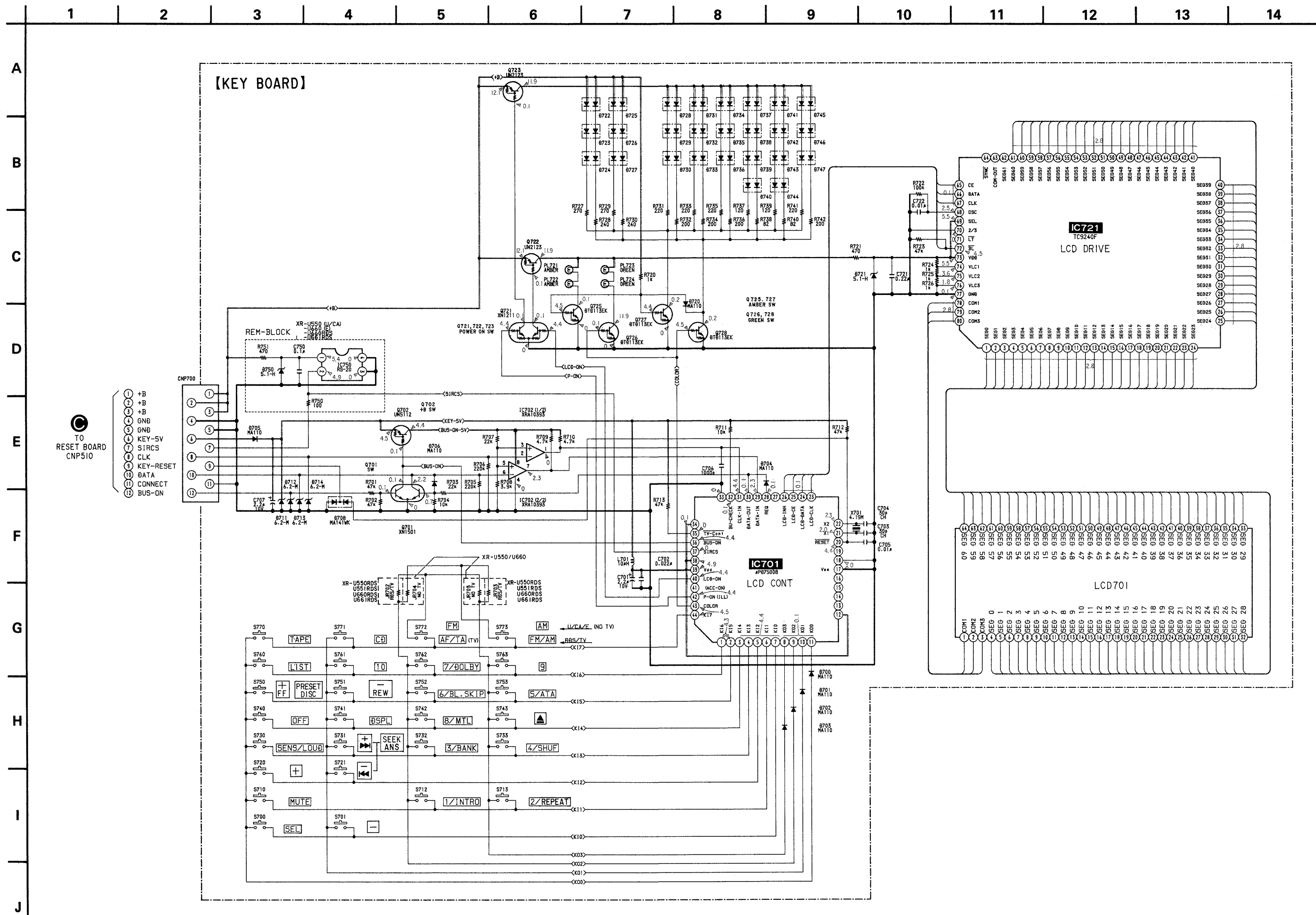
• : Pattern of the rear side.

- See page 31 for IC Block Diagrams.





4-6. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM (KEY SECTION)



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D700	C-3	D737	C-5
D701	C-3	D738	C-6
D702	B-5	D739	C-6
D703	C-5	D740	C-7
D704	B-6	D741	C-7
D705	B-10	D742	C-7
D711	B-10	D743	C-6
D712	C-10	D744	C-6
D713	C-10	D745	C-4
D714	C-10	D746	C-3
D720	E-3	D747	C-2
D721	F-4		
D722	A-9	IC702	C-8
D723	A-10	IC750	B-9
D724	B-10		
D725	B-10	Q701	C-9
D726	C-10	Q702	C-8
D727	C-10	Q721	C-6
D728	C-9	Q722	F-2
D729	C-9	Q723	C-7
D730	C-10	Q724	F-4
D731	C-7	Q726	F-2
D732	C-8	Q727	E-3
D733	C-8	Q728	E-3
D734	C-8		
D735	C-9	IC701	F-5
D736	C-9	IC721	G-3

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF ; μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4} \text{ W}$ or less unless otherwise specified.
- % : indicates tolerance.
- $\frac{B}{A} \pm \text{Line.}$: B $\pm$ Line. %
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BAT and ACC terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (idled) conditions.
- no mark : PB
- () : STOP
- Signal path,
- Σ : PB

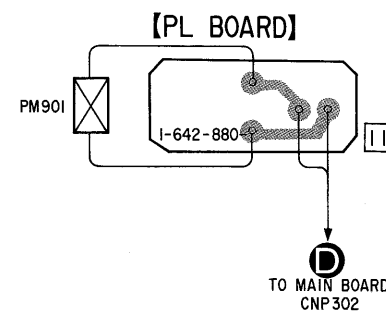
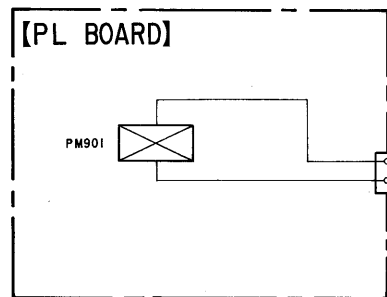
Note on Printed Wiring Board:

- — : parts extracted from the component side.
 - : Through hole.
 - ▨ : Pattern from the side which enables seeing.
- (The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- See page 31 for IC Block Diagrams.

1 2



REVISED

SECTION 5 EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) ... (RED)

↑ ↑
Parts Color Cabinet's Color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

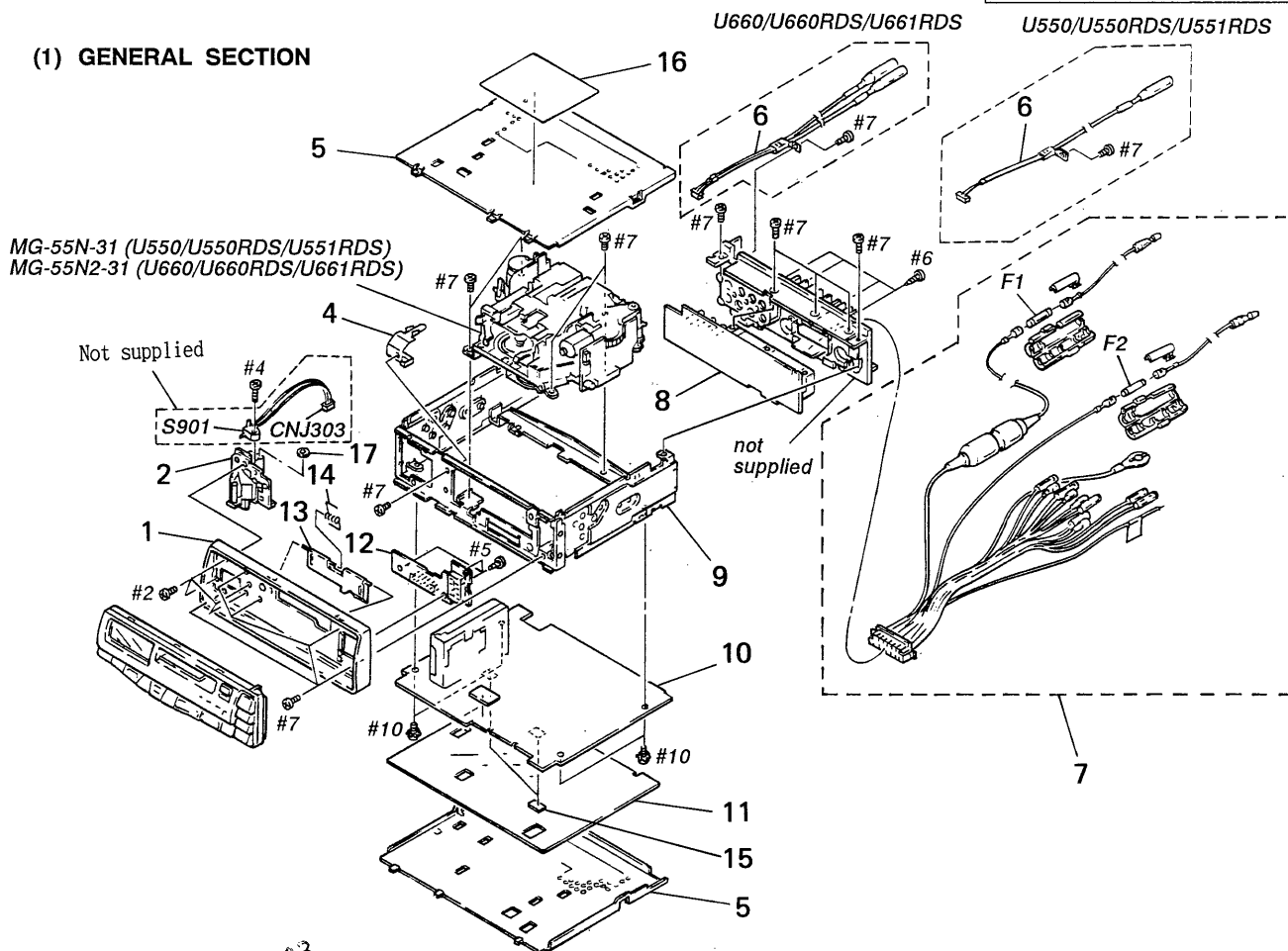
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

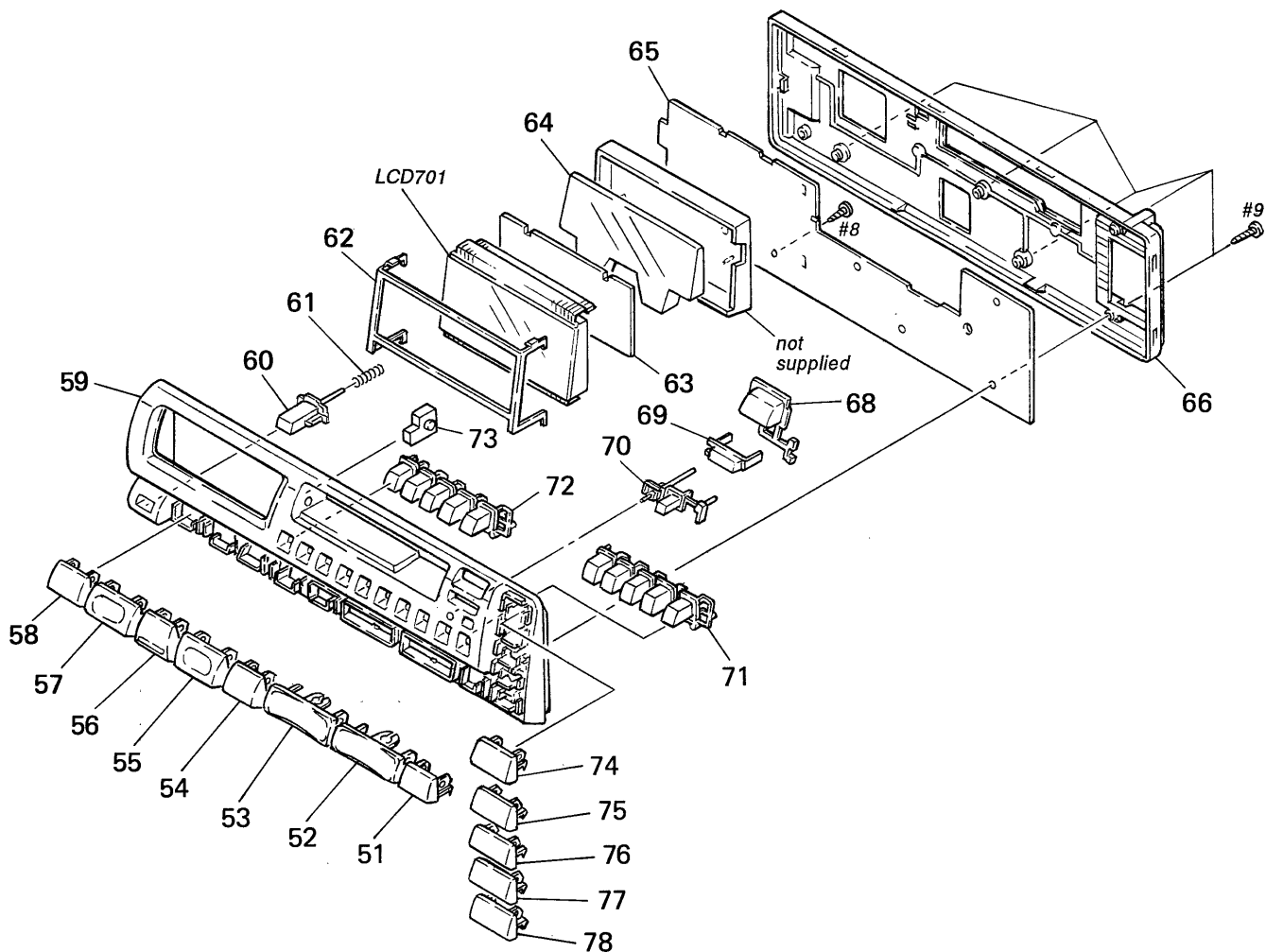
(1) GENERAL SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-377-586-01	PANEL, SUB (EXCEPT U550)	
* 1	3-377-595-01	PANEL, SUB (U550)	
2	X-3364-564-1	LOCK ASSY	
~~3~~	~~X-3365-035-1~~	~~SWITCH ASSY~~	
* 4	3-377-825-01	PLATE, LOCK (EXCEPT U550RDS/U551RDS)	
* 4	3-381-198-01	PLATE, LOCK (U550RDS/U551RDS)	
* 5	3-377-591-01	COVER	
6	1-574-339-11	CORD (WITH CONNECTOR)	
6	1-690-212-21	CORD (WITH CONNECTOR) (ANT)	(U550/U550RDS/U551RDS)
6	1-690-944-11	CORD (WITH CONNECTOR) (ANT)	(U660/U660RDS/U661RDS)
7	1-690-741-11	CORD (WITH CONNECTOR) (U550)	
7	1-690-742-11	CORD (WITH CONNECTOR) (EXCEPT U550)	
* 8	A-3273-841-A	AMPLIFIER BOARD, COMPLETE	(U660RDS/U661RDS)
* 8	A-3295-042-A	AMPLIFIER BOARD, COMPLETE (U550, U660)	
* 8	A-3295-075-A	AMPLIFIER BOARD, COMPLETE (U550RDS/U551RDS)	
* 9	X-3364-781-1	CHASSIS ASSY	
* 10	A-3273-832-A	MAIN BOARD, COMPLETE (U660RDS) (AEP)	
* 10	A-3273-833-A	MAIN BOARD, COMPLETE (U660RDS;G)	
* 10	A-3273-834-A	MAIN BOARD, COMPLETE (U661RDS)	
* 10	A-3273-835-A	MAIN BOARD, COMPLETE (U660)	

Ref. No.	Part No.	Description	Remark
* 10	A-3273-883-A	MAIN BOARD, COMPLETE (U550;US, CND)	
* 10	A-3295-076-A	MAIN BOARD, COMPLETE (U550RDS;AEP)	
* 10	A-3295-080-A	MAIN BOARD, COMPLETE (U551RDS)	
* 10	A-3295-082-A	MAIN BOARD, COMPLETE (U550RDS;G)	
* 10	A-3295-281-A	MAIN BOARD, COMPLETE (U550;E)	
* 11	3-377-593-01	INSULATOR	
* 12	1-642-927-11	RESET BOARD	
13	3-377-598-01	DOOR, CASSETTE (U550)	
13	3-377-598-11	DOOR, CASSETTE (U660RDS)	
13	3-377-598-21	DOOR, CASSETTE (U661RDS)	
13	3-377-598-31	DOOR, CASSETTE (U551RDS)	
13	3-377-598-41	DOOR, CASSETTE (U550RDS)	
13	3-377-598-51	DOOR, CASSETTE (U660)	
14	3-377-892-01	SPRING (C DOOR), TORSION COIL	
15	9-911-841-XX	CUSHION, CASSETTE LID (EXCEPT U550)	
* 16	3-377-819-01	LABEL, MODEL NUMBER (U661RDS)	
16	3-377-820-02	LABEL, MODEL NUMBER (U660RDS;AEP)	
* 16	3-377-821-01	LABEL, MODEL NUMBER (U660RDS)	
* 16	3-377-822-01	LABEL, MODEL NUMBER (U550;US, CND)	
* 16	3-378-739-01	LABEL, MODEL NUMBER (U660)	
* 16	3-378-740-01	LABEL, MODEL NUMBER (U551RDS)	
* 16	3-378-741-01	LABEL, MODEL NUMBER (U550RDS)	
* 16	3-385-835-01	LABEL, MODEL NUMBER (U550;E)	
17	3-701-436-11	WASHER, STOPPER	
* CNJ303	1-563-470-11	HOUSING, CONNECTOR 2P	
Δ F1	1-532-678-11	FUSE 12A	
Δ F2	1-532-414-11	FUSE 1A	
son1	1-570-771-11	SWITCH	

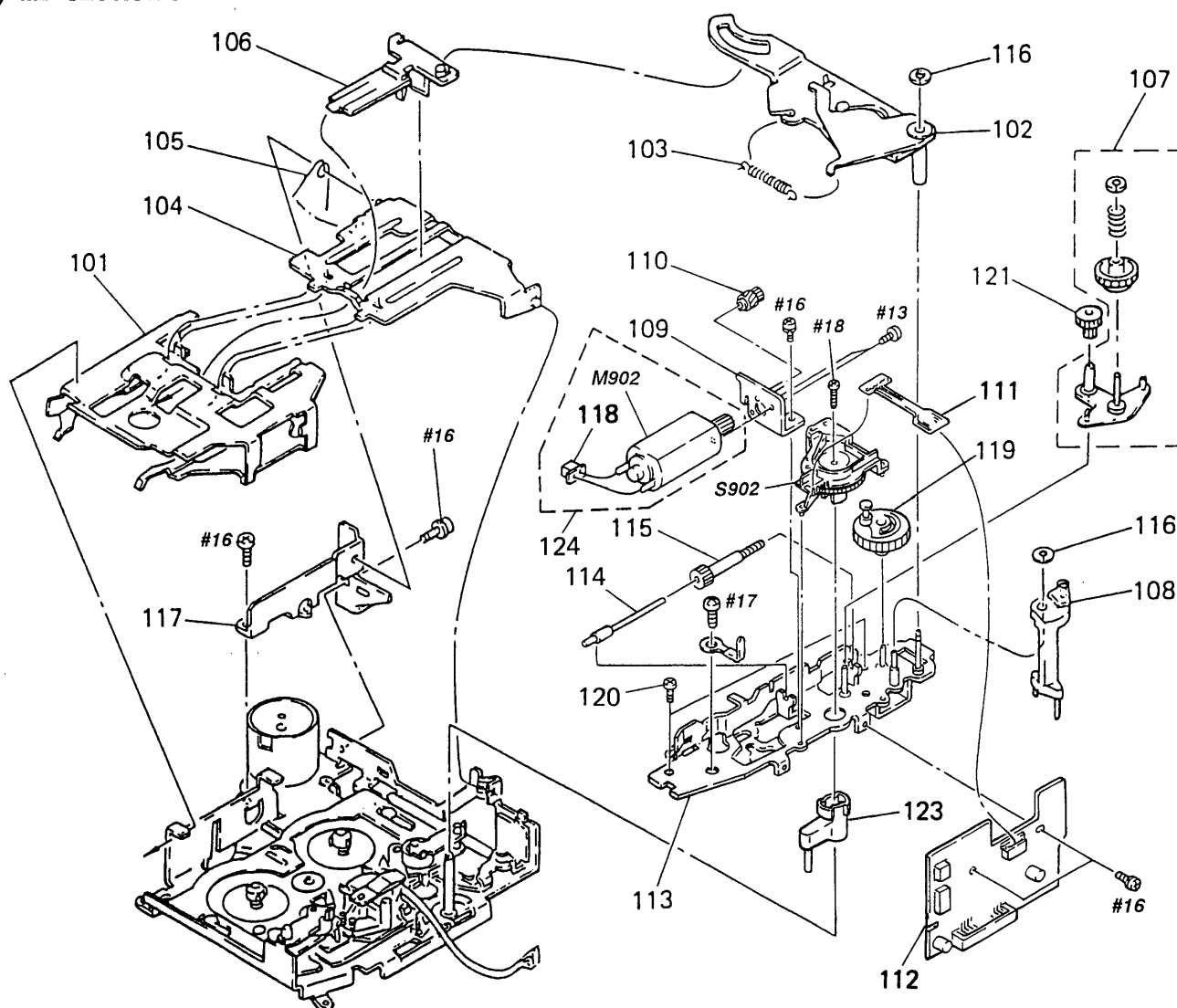
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-377-564-01	BUTTON (LIST)	
52	3-377-571-01	BUTTON (DISC)	
53	3-377-572-01	BUTTON (SEEK)	
54	3-377-567-01	BUTTON (LOUD)	
55	3-377-570-01	BUTTON (+)	
56	3-377-568-01	BUTTON (SELECT)	
57	3-377-569-01	BUTTON (-)	
58	3-377-573-01	BUTTON (MUTE)	
59	3-377-580-01	PANEL, FRONT (U661RDS)	
59	3-377-580-11	PANEL, FRONT (U660RDS)	
59	3-377-580-21	PANEL, FRONT (U550)	
59	3-377-580-32	PANEL, FRONT (U551RDS)	
59	3-377-580-42	PANEL, FRONT (U550RDS)	
59	3-377-580-51	PANEL, FRONT (U660)	
60	3-377-577-01	BUTTON (RELEASE)	
61	3-375-373-01	SPRING (RELEASE)	
* 62	3-377-576-01	COVER (LCD)	
* 63	3-377-597-01	SHEET (REFLECTOR)	
* 64	3-377-581-01	PLATE (LCD), LIGHT GUIDE	
* 65	A-3222-383-A	PC BOARD ASSY, KEY (U660RDS/U661RDS)	
* 65	A-3222-394-A	PC BOARD ASSY, KEY (U550/U660)	
* 65	A-3222-446-A	PC BOARD ASSY, KEY (U550RDS/U551RDS)	

Ref. No.	Part No.	Description	Remark
* 66	3-377-585-01	PANEL, FRONT BACK	
68	3-377-560-01	BUTTON (EJECT)	
69	3-377-579-01	CATCHER, RAY, FILTER (EXCEPT U550RDS, U551RDS)	
69	3-381-491-01	COVER (FILTER) (U550RDS, U551RDS)	
70	3-377-582-01	BUTTON (RESET)	
71	3-377-575-01	BUTTON (PRESET 6-10)	
72	3-377-574-01	BUTTON (PRESET 1-5)	
73	3-377-588-01	PLATE (C DOOR), LIGHT GUIDE	
74	3-377-561-11	BUTTON (AF/TA) (U550RDS/U551RDS/U660/U660RDS/U661RDS)	
74	3-377-561-21	BUTTON (FM) (U550/U660)	
75	3-377-563-01	BUTTON (FM/AM) (U550RDS/U660RDS)	
75	3-377-563-11	BUTTON (FM/LW) (U551RDS/U661RDS)	
75	3-377-563-21	BUTTON (AM) (U550/U660)	
76	3-377-566-01	BUTTON (TAPE)	
77	3-377-565-01	BUTTON (CD)	
78	3-377-562-01	BUTTON (OFF)	
LCD701	1-809-595-11	DISPLAY PANEL, LIQUID CRYSTAL	

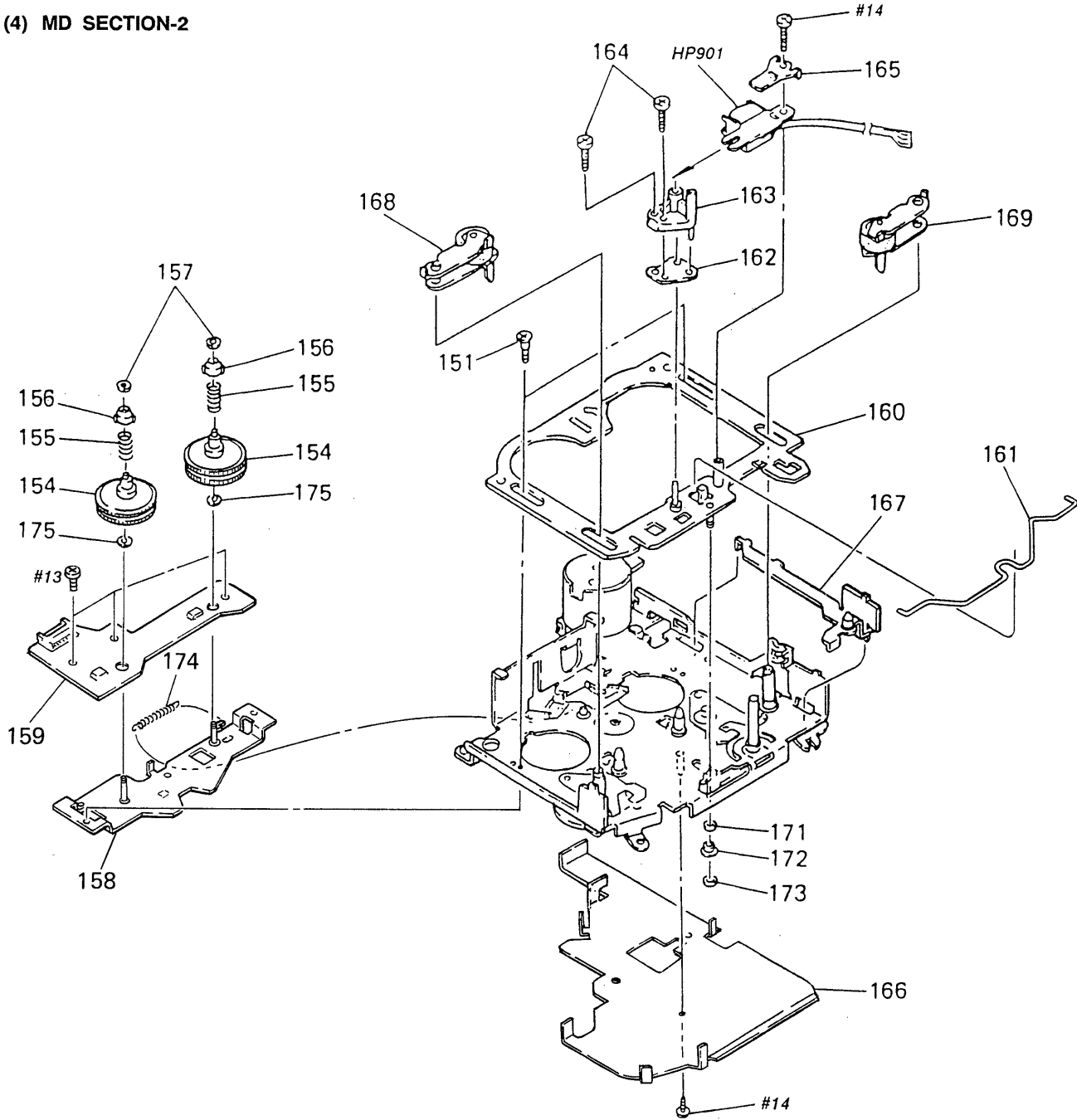
(3) MD SECTION-1



Ref. No.	Part No.	Description	Remark
* 101	3-344-103-21	HOUSING, CASSETTE	
* 102	X-3344-121-1	ARM ASSY, SUCTION	
103	3-344-216-01	SPRING (SUCTION ARM), TENSION	
* 104	X-3362-262-1	HANGER (F) ASSY, HOUSING	
105	3-344-113-03	SPRING	
* 106	3-344-118-01	CATCHER	
107	A-3239-954-A	GEAR ASSY, DRIVING ARM	
* 108	3-344-260-01	ARM, REVERSE	
* 109	X-3344-142-2	BRACKET (F) ASSY, MOTOR	
110	3-344-281-01	GEAR (A), DRIVING	
111	1-635-519-12	PC BOARD, FLEXIBLE	
* 112	A-3222-377-A	EQ BOARD, COMPLETE (MG-55N2-31)	
* 112	A-3222-398-A	EQ BOARD, COMPLETE (MG-55N-31)	
* 113	X-3362-260-3	CHASSIS (F) ASSY, MCU	

Ref. No.	Part No.	Description	Remark
114	3-344-157-01	SEAFT, DRIVING GEAR (B)	
115	3-344-156-01	GEAR (A), DRIVING	
116	3-344-222-01	WASHER	
117	3-368-239-13	BRACKET (U), HANGER	
* 118	1-565-121-11	HOUSING, CONNECTOR 2P	
119	X-3344-119-1	GEAR ASSY, LOADING CAM	
120	3-703-502-21	SCREW	
121	3-344-108-01	GEAR (A), FRICTION	
123	X-3344-117-1	ARM ASSY, MODE	
124	A-3252-174-A	MOTOR SUB ASSY, L	
M902	X-3362-826-1	GEAR ASSY, MOTOR	
S902	1-572-397-11	SWITCH, ROTARY SLIDE	

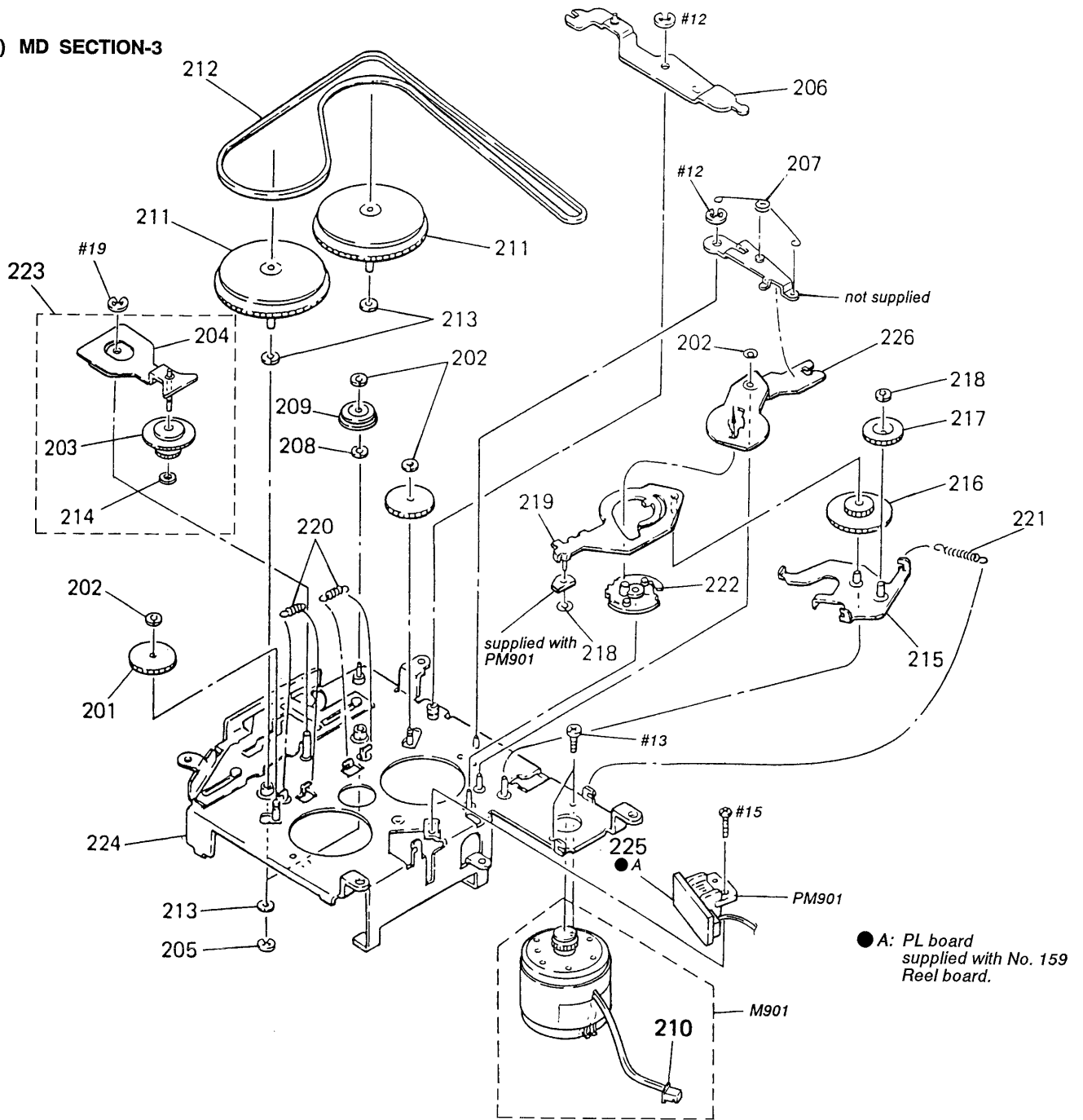
(4) MD SECTION-2



Ref. No.	Part No.	Description	Remark
151	3-344-110-01	SCREW (HB), STEP	
154	X-3362-214-1	TABLE (F) ASSY, REEL	
155	3-344-143-01	SPRING (BT), COMPRESSION	
156	3-365-725-01	CAP (F), REEL	
157	3-364-151-01	WASHER	
* 158	X-3344-144-2	BRACKET (F) ASSY, REEL TABLE	
* 159	1-642-879-11	REEL BOARD	
160	X-3362-261-1	BASE ASSY (R), HEAD (MG-55N2-31)	
160	X-3362-261-2	BASE ASSY (R), HEAD (MG-55N-31)	
* 161	3-363-909-01	SPRING (R), PINCH PRESS	
162	3-344-128-01	SHIM, DAH	
163	3-372-170-01	ARM, DAH	
164	3-364-122-01	SCREW (M1.4X5.5), ADJ	

Ref. No.	Part No.	Description	Remark
165	3-344-130-01	RETAINER, HEAD	
* 166	3-344-220-01	COVER, MD	
* 167	X-3344-118-1	LEVER ASSY, RVS CONVERSION	
168	X-3344-115-1	ARM (R) ASSY, PINCH	
169	X-3344-116-1	ARM (F) ASSY, PINCH	
171	3-344-117-01	ROLLER (B), H/B	
172	3-344-116-01	ROLLER (A), H/B	
173	3-344-222-01	WASHER	
174	3-344-217-01	SPRING (CAM LOCK LEVER), TENTION	
175	3-701-437-01	POLY-SLIDER (A)	
HP901	1-543-726-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N-31)	
HP901	1-543-800-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N2-31)	

(5) MD SECTION-3



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-344-104-01	GEAR, PLAY		* 215	X-3344-106-1	LEVER ASSY, RVS GEAR (B)	
202	3-344-222-01	WASHER		216	3-344-146-01	GEAR (B), RVS	
203	X-3344-102-1	GEAR ASSY, FR		217	3-344-147-01	GEAR (A), RVS	
* 204	X-3344-101-1	ARM ASSY, FR		218	3-344-223-01	WASHER	
205	3-364-151-01	WASHER		219	X-3344-107-1	LEVER ASSY, CAM LOCK	
* 206	X-3344-139-1	ARM ASSY, POWER		220	3-344-218-02	SPRING (PLAY ARM), TENSION	
207	3-344-279-01	SPRING, BUFFER		221	3-344-215-01	SPRING, TENSION	
208	3-701-436-01	WASHER, 1.6		222	3-344-119-01	GEAR, RVS CAM	
209	3-371-905-01	PULLEY (M), MIDWAY		223	A-3239-947-A	GEAR SUB ASSY, FR	
* 210	1-563-470-11	HOUSING, CONNECTOR 2P		* 224	X-3362-215-6	CHASSIS (L) ASSY, MECHANICAL	
211	3-344-261-01	FLYWHEEL (M)		* 225	1-642-880-11	PL BOARD	
212	3-344-115-01	BELT		* 226	X-3344-114-1	LEVER ASSY, RVS	
213	3-701-437-01	POLY-SLIDER (A)		M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
214	3-344-224-01	WASHER		PM901	1-454-461-11	SOLENOID, PLUNGER	

AMPLIFITER

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When including parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark			
*	A-3273-841-A	AMPLIFIER BOARD, COMPLETE				

		(EXCEPT U550RDS, U551RDS)				
*	A-3295-075-A	AMPLIFIER BOARD, COMPLETE				

		(U550RDS/U551RDS)				
		< CAPACITOR >				
C801	1-128-113-11	ELECT	3.3uF	20%	50V	
C802	1-128-113-11	ELECT	3.3uF	20%	50V	
C803	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	
C804	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	
C805	1-128-112-11	ELECT	33uF	20%	10V	
C806	1-128-112-11	ELECT	33uF	20%	10V	
C807	1-126-335-11	ELECT	220uF	20%	10V	
C808	1-106-224-00	MYLAR	0.15uF	5%	100V	
C809	1-106-224-00	MYLAR	0.15uF	5%	100V	
C810	1-106-224-00	MYLAR	0.15uF	5%	100V	
C811	1-106-224-00	MYLAR	0.15uF	5%	100V	
C812	1-128-355-91	ELECT	2200uF	20%	16V	
C903	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	
C904	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	
C905	1-128-112-11	ELECT	33uF	20%	10V	
C906	1-128-112-11	ELECT	33uF	20%	10V	
C907	1-126-335-11	ELECT	220uF	20%	10V	
C908	1-106-224-00	MYLAR	0.15uF	5%	100V	
C909	1-106-224-00	MYLAR	0.15uF	5%	100V	
C910	1-106-224-00	MYLAR	0.15uF	5%	100V	
C911	1-106-224-00	MYLAR	0.15uF	5%	100V	
C912	1-128-355-91	ELECT	2200uF	20%	16V	
C915	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C916	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C917	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C918	1-162-282-31	CAP, CERAMIC	100PF			
		< JACK >				
CNJ901	1-691-683-11	JACK, PIN 4P (LINE OUT/UNILINK IN)				
		(U550RDS/U551RDS)				
CNJ901	1-691-684-11	JACK, PIN 6P (LINE OUT/UNILINK IN)				
		(EXCEPT U550RDS, U551RDS)				

Ref. No.	Part No.	Description	Remark			
< CONNECTOR >						
CNP901	1-691-745-21	PLUG, CONNECTOR 18P				
CNP902	1-691-685-11	CONNECTOR 17P				
< DIODE >						
D809	8-719-313-73	DIODE	SFPB-52V			
D810	8-719-313-73	DIODE	SFPB-52V			
D811	8-719-313-73	DIODE	SFPB-52V			
D812	8-719-313-73	DIODE	SFPB-52V			
D901	8-719-422-77	DIODE	MA8075-M-TX			
< DIODE >						
D901	8-719-977-16	DIODE	DTZ7.5B			
D904	8-719-027-24	DIODE	DSA3A4-F			
D908	8-719-313-73	DIODE	SFPB-52V			
D909	8-719-313-73	DIODE	SFPB-52V			
D910	8-719-313-73	DIODE	SFPB-52V			
< DIODE >						
D911	8-719-313-73	DIODE	SFPB-52V			
< IC >						
IC801	8-759-243-27	IC	TA8215H			
IC901	8-759-243-27	IC	TA8215H			
< JUMPER RESISTOR >						
JR801	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR802	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR901	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR902	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR999	1-216-295-00	METAL CHIP	0	5%	1/10W	
< TRANSISTOR >						
Q801	8-729-920-21	TRANSISTOR	DTC314TKH04			
Q802	8-729-920-21	TRANSISTOR	DTC314TKH04			
Q901	8-729-920-21	TRANSISTOR	DTC314TKH04			
Q902	8-729-920-21	TRANSISTOR	DTC314TKH04			
< RESISTOR >						
R801	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R802	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R803	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R804	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	

AMPLIFIER

EQ

Ref. No.	Part No.	Description	Remark		
R805	1-216-097-00	METAL CHIP	100K	5%	1/10W
R806	1-216-041-00	METAL CHIP	470	5%	1/10W
R807	1-216-041-00	METAL CHIP	470	5%	1/10W
R808	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R809	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R810	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R811	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R812	1-216-081-00	METAL CHIP	22K	5%	1/10W
R813	1-216-081-00	METAL CHIP	22K	5%	1/10W
R814	1-216-047-00	METAL CHIP	820	5%	1/10W
R815	1-216-047-00	METAL CHIP	820	5%	1/10W
R901	1-216-081-00	METAL CHIP	22K	5%	1/10W
R902	1-216-081-00	METAL CHIP	22K	5%	1/10W
R903	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R904	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R905	1-216-097-00	METAL CHIP	100K	5%	1/10W
R906	1-216-041-00	METAL CHIP	470	5%	1/10W
R907	1-216-041-00	METAL CHIP	470	5%	1/10W
R908	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R909	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R910	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R911	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R912	1-216-081-00	METAL CHIP	22K	5%	1/10W
R913	1-216-081-00	METAL CHIP	22K	5%	1/10W
R914	1-216-047-00	METAL CHIP	820	5%	1/10W
R915	1-216-047-00	METAL CHIP	820	5%	1/10W
< THERMISTOR(POSITIVE) >					
THP901	1-809-148-11	THERMISTOR, POSITIVE			
THP902	1-809-148-11	THERMISTOR, POSITIVE			

*	A-3222-377-A	EQ BOARD, COMPLETE			

< CAPACITOR >					
C101	1-137-278-11	FILM CHIP	470PF	5%	16V
C102	1-137-278-11	FILM CHIP	470PF	5%	16V
C103	1-126-607-11	ELECT CHIP	47uF	20%	4V
C104	1-137-294-11	FILM CHIP	0.01uF	5%	16V
C201	1-137-278-11	FILM CHIP	470PF	5%	16V
C202	1-137-278-11	FILM CHIP	470PF	5%	16V
C203	1-126-607-11	ELECT CHIP	47uF	20%	4V
C204	1-137-294-11	FILM CHIP	0.01uF	5%	16V
C302	1-128-010-11	ELECT CHIP	0.22uF	20%	50V
C303	1-128-004-11	ELECT CHIP	10uF	20%	16V
C304	1-128-004-11	ELECT CHIP	10uF	20%	16V
C305	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C306	1-128-065-11	ELECT CHIP	68uF	20%	10V

Ref. No.	Part No.	Description	Remark		
C307	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C308	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C309	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C401	1-164-222-11	CERAMIC CHIP	0.22uF		25V
< CONNECTOR >					
CNP301	1-569-806-21	CONNECTOR, FPC 5P			
* CNP302	1-691-686-21	PLUG, CONNECTOR1R17P			
CNP401	1-691-741-21	PIN, CONNECTOR (PC BOARD) 2P			
CNP402	1-569-806-21	CONNECTOR, FPC 5P			
< DIODE >					
D301	8-719-404-46	DIODE	MA110		
D302	8-719-404-35	DIODE	MA141WK		
< IC >					
IC301	8-759-988-33	IC	BA3430FS		
< RESISTOR >					
R103	1-216-851-11	METAL CHIP	330K	5%	1/16W
R104	1-216-834-11	METAL CHIP	12K	5%	1/16W
R105	1-216-836-11	METAL CHIP	18K	5%	1/16W
R203	1-216-851-11	METAL CHIP	330K	5%	1/16W
R204	1-216-834-11	METAL CHIP	12K	5%	1/16W
R205	1-216-836-11	METAL CHIP	18K	5%	1/16W
R301	1-216-833-11	METAL CHIP	10K	5%	1/16W
R302	1-216-845-11	METAL CHIP	100K	5%	1/16W
R303	1-216-864-11	METAL CHIP	0	5%	1/16W
R304	1-216-811-11	METAL CHIP	150	5%	1/16W
< NETWORK RESISTOR >					
RB301	1-239-286-91	RESISTOR, NETWORK (CHIP TYPE)			
< VARIABLE RESISTOR >					
RV101	1-241-552-11	RES, ADJ CERMET 470			
RV201	1-241-552-11	RES, ADJ CERMET 470			
< SWITCH >					
S401	1-570-953-11	SWITCH, PUSH (1 KEY)			
S402	1-570-953-11	SWITCH, PUSH (1 KEY)			

MAIN

Ref. No.	Part No.	Description	Remark		
*	A-3273-832-A	MAIN BOARD, COMPLETE (U660RDS;AEP) *****			
*	A-3273-833-A	MAIN BOARD, COMPLETE (U660RDS;G) *****			
*	A-3273-834-A	MAIN BOARD, COMPLETE (U661RDS) *****			
*	A-3273-835-A	MAIN BOARD, COMPLETE (U660) *****			
*	A-3273-883-A	MAIN BOARD, COMPLETE (U550;US,CND) *****			
*	A-3295-076-A	MAIN BOARD, COMPLETE (U550RDS) *****			
*	A-3295-080-A	MAIN BOARD, COMPLETE (U551RDS) *****			
*	A-3295-281-A	MAIN BOARD, COMPLETE (U550;E) *****			
< CAPACITOR >					
C1	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (U660/U660RDS/U661RDS)
C2	1-126-161-11	ELECT	2.2uF	20%	35V
C3	1-124-589-11	ELECT	47uF	20%	16V
C4	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C5	1-126-157-11	ELECT	10uF	20%	16V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (U660/U660RDS/U661RDS)
C7	1-163-117-00	CERAMIC CHIP	100PF	5%	50V (U660/U660RDS/U661RDS)
C8	1-164-232-11	CERAMIC CHIP	0.01uF		50V (U660/U660RDS/U661RDS)
C9	1-130-475-00	MYLAR	0.0022uF	5%	50V (U660/U660RDS/U661RDS)
C10	1-163-117-00	CERAMIC CHIP	100PF	5%	50V (U660/U660RDS/U661RDS)
C11	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V (U660/U660RDS/U661RDS)
C12	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (U660/U660RDS/U661RDS)
C13	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (U660/U660RDS/U661RDS)
C14	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (U660/U660RDS/U661RDS)
C15	1-164-232-11	CERAMIC CHIP	0.01uF		50V (U660/U660RDS/U661RDS)
C16	1-126-157-11	ELECT	10uF	20%	16V (U660/U660RDS/U661RDS)
C17	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V (U660/U660RDS/U661RDS)
C18	1-163-161-00	CERAMIC CHIP	15PF	5%	50V
C19	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C20	1-126-154-11	ELECT	47uF	20%	6.3V
C21	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C22	1-130-479-00	MYLAR	0.0047uF	5%	50V

Ref. No.	Part No.	Description	Remark			
C23	1-136-169-00	FILM	0.22uF	5%	50V	
C24	1-124-584-00	ELECT	100uF	20%	10V	
C25	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C26	1-124-464-11	ELECT	0.22uF	20%	50V	
C27	1-126-301-11	ELECT	1uF	20%	50V	
C28	1-126-301-11	ELECT	1uF	20%	50V	
C29	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V	
C30	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V	
C31	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C32	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C33	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C34	1-163-157-00	FILM	0.022uF	5%	50V	
C35	1-126-288-11	ELECT	4.7uF	20%	16V	
C36	1-124-584-00	ELECT	100uF	20%	10V	
C37	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C38	1-126-153-11	ELECT	22uF	20%	6.3V	
C39	1-163-002-11	CERAMIC CHIP	270PF	10%	50V	(U550RDS/U551RDS/U660RDS/U661RDS)
C40	1-126-157-11	ELECT	10uF	20%	16V	(U550RDS/U551RDS/U660RDS/U661RDS)
C41	1-164-232-11	CERAMIC CHIP	0.01uF		50V	(U550RDS/U551RDS/U660RDS/U661RDS)
C42	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	(U550RDS/U551RDS/U660RDS/U661RDS)
C43	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	(U550RDS/U551RDS/U660RDS/U661RDS)
C45	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	(U550RDS/U551RDS/U660RDS/U661RDS)
C46	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C47	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C48	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V	
C49	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	(U550RDS/U551RDS/U660RDS/U661RDS)
C50	1-163-257-11	CERAMIC CHIP	180PF	5%	50V	
C51	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C53	1-161-379-00	CERAMIC	0.01uF	20%	25V	(U550RDS/U660RDS)
C110	1-126-301-11	ELECT	1uF	20%	50V	
C111	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C112	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C113	1-128-341-11	ELECT	0.56uF	20%	50V	
C114	1-124-252-00	ELECT	0.33uF	20%	50V	
C121	1-126-288-11	ELECT	4.7uF	20%	16V	
C122	1-126-288-11	ELECT	4.7uF	20%	16V	
C123	1-126-288-11	ELECT	4.7uF	20%	16V	
C124	1-126-157-11	ELECT	10uF	20%	16V	
C125	1-126-157-11	ELECT	10uF	20%	16V	
C126	1-126-157-11	ELECT	10uF	20%	16V	
C127	1-130-476-00	MYLAR	0.0027uF	5%	50V	

MAIN

Ref. No.	Part No.	Description	Remark		
C128	1-136-162-00	FILM	0.056uF	5%	50V
C129	1-136-162-00	FILM	0.056uF	5%	50V
C130	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C131	1-126-157-11	ELECT	10uF	20%	16V
C132	1-126-159-11	ELECT	0.47uF	20%	50V
C133	1-130-476-00	MYLAR	0.0027uF	5%	50V
C134	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C135	1-126-288-11	ELECT	4.7uF	20%	16V
C136	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C137	1-126-288-11	ELECT	4.7uF	20%	16V
C138	1-124-584-00	ELECT	100uF	20%	10V
C139	1-126-288-11	ELECT	4.7uF	20%	16V
C210	1-126-301-11	ELECT	1uF	20%	50V
C211	1-130-475-00	MYLAR	0.0022uF	5%	50V
C212	1-130-475-00	MYLAR	0.0022uF	5%	50V
C213	1-128-341-11	ELECT	0.56uF	20%	50V
C214	1-124-252-00	ELECT	0.33uF	20%	50V
C221	1-126-288-11	ELECT	4.7uF	20%	16V
C222	1-126-288-11	ELECT	4.7uF	20%	16V
C223	1-126-288-11	ELECT	4.7uF	20%	16V
C224	1-126-157-11	ELECT	10uF	20%	16V
C225	1-126-157-11	ELECT	10uF	20%	16V
C226	1-126-157-11	ELECT	10uF	20%	16V
C227	1-130-476-00	MYLAR	0.0027uF	5%	50V
C228	1-136-162-00	FILM	0.056uF	5%	50V
C229	1-136-162-00	FILM	0.056uF	5%	50V
C230	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C231	1-126-157-11	ELECT	10uF	20%	16V
C232	1-126-159-11	ELECT	0.47uF	20%	50V
C233	1-130-476-00	MYLAR	0.0027uF	5%	50V
C234	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C235	1-126-288-11	ELECT	4.7uF	20%	16V
C236	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C237	1-126-288-11	ELECT	4.7uF	20%	16V
C238	1-124-584-00	ELECT	100uF	20%	10V
C239	1-126-288-11	ELECT	4.7uF	20%	16V
C310	1-124-584-00	ELECT	100uF	20%	10V
C311	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C312	1-126-157-11	ELECT	10uF	20%	16V
C313	1-126-157-11	ELECT	10uF	20%	16V
C321	1-126-301-11	ELECT	1uF	20%	50V
C324	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C325	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C326	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C431	1-126-103-11	ELECT	470uF	20%	16V
C432	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C433	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C501	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C502	1-163-227-11	CERAMIC CHIP	10PF	5%	50V

Ref. No.	Part No.	Description	Remark		
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C507	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C508	1-162-638-11	CERAMIC CHIP	1uF		16V
C509	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C510	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C511	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C512	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C515	1-124-584-00	ELECT	100uF	20%	10V
C516	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C517	1-124-589-11	ELECT	47uF	20%	16V
C518	1-126-301-11	ELECT	1uF	20%	50V
C519	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C520	1-124-234-00	ELECT	22uF	20%	16V
C521	1-124-584-00	ELECT	100uF	20%	10V
C522	1-124-584-00	ELECT	100uF	20%	10V
C523	1-124-584-00	ELECT	100uF	20%	10V
C524	1-124-584-00	ELECT	100uF	20%	10V
C525	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C526	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C527	1-126-157-11	ELECT	10uF	20%	16V
C528	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C529	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C530	1-126-288-11	ELECT	4.7uF	20%	16V
C531	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C532	1-125-701-11	CAP, DOUBLE LAYER			0.047F
C533	1-124-584-00	ELECT	100uF	20%	10V
C534	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C535	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C536	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C537	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C539	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C540	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C541	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C542	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C543	1-126-157-11	ELECT	10uF	20%	16V
C544	1-126-162-11	ELECT	3.3uF	20%	50V
C545	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C546	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C547	1-126-301-11	ELECT	1uF	20%	50V
C548	1-126-301-11	ELECT	1uF	20%	50V
C549	1-126-288-11	ELECT	4.7uF	20%	16V
C550	1-126-153-11	ELECT	22uF	20%	6.3V
C551	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C553	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V

MAIN

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

* CNP1	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P (U660/U660RDS/U661RDS)	
* CNP301	1-691-743-21	SOCKET, CONNECTOR 17P	
* CNP302	1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P	
* CNP303	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P	
* CNP401	1-691-739-11	CONNECTOR, BOARD TO BOARD 14P	
* CNP501	1-691-744-11	SOCKET, CONNECTOR 18P	
CNP502	1-580-907-11	PLUG, CONNECTOR	

< TRIMMER >

CT501	1-141-276-00	CAP, TRIMMER	
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< DIODE >

D1	8-719-971-18	DIODE 1SS318 (U660/U660RDS/U661RDS)	
D2	8-719-988-62	DIODE 1SS355 (U660/U660RDS/U661RDS)	
D3	8-719-977-25	DIODE DTZ9.1C-TT11	
D4	8-719-977-28	DIODE DTZ10B	
D5	8-719-988-62	DIODE 1SS355	
D9	8-719-988-62	DIODE 1SS355	
D10	8-719-400-18	DIODE MA152WK	
D11	8-719-988-62	DIODE 1SS355	
D12	8-719-971-18	DIODE 1SS318 (U660/U660RDS/U661RDS)	
D13	8-719-988-62	DIODE 1SS355	
D321	8-719-800-76	DIODE 1SS226	
D322	8-719-976-85	DIODE DTZ3.6B	
D323	8-719-988-62	DIODE 1SS355	
D431	8-719-988-62	DIODE 1SS355	
D432	8-719-988-62	DIODE 1SS355	
D433	8-719-400-18	DIODE MA152WK	
D434	8-719-977-25	DIODE DTZ9.1C-TT11	
D435	8-719-988-62	DIODE 1SS355	
D501	8-719-988-62	DIODE 1SS355	
D502	8-719-988-62	DIODE 1SS355	
D503	8-719-400-18	DIODE MA152WK	
D504	8-719-988-62	DIODE 1SS355 (U550RDS/U551RDS/U660RDS/U661RDS)	
D505	8-719-988-62	DIODE 1SS355	
D506	8-719-988-62	DIODE 1SS355	
D507	8-719-988-62	DIODE 1SS355	
D508	8-719-400-18	DIODE MA152WK	
D509	8-719-977-07	DIODE DTZ6.2B	
D510	8-719-977-07	DIODE DTZ6.2B	
D511	8-719-988-62	DIODE 1SS355	
D512	8-719-977-07	DIODE DTZ6.2B	
D513	8-719-977-07	DIODE DTZ6.2B	
D514	8-719-978-20	DIODE DTZ5.1A-TT11	
D515	8-719-104-34	DIODE 1S2836	

Ref. No.	Part No.	Description	Remark
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D516	8-719-988-62	DIODE 1SS355	
D517	8-719-977-16	DIODE DTZ7.5B	
D518	8-719-988-62	DIODE 1SS355	
D519	8-719-976-85	DIODE DTZ3.6B	
D520	8-719-977-25	DIODE DTZ9.1C-TT11	

D521	8-719-977-03	DIODE DTZ5.6B	
D522	8-719-977-32	DIODE DTZ11B	
D523	8-719-988-62	DIODE 1SS355	
D524	8-719-977-16	DIODE DTZ7.5B	
D525	8-719-988-62	DIODE 1SS355	

D526	8-719-977-25	DIODE DTZ9.1C-TT11	
D527	8-719-977-07	DIODE DTZ6.2B	
D528	8-719-977-16	DIODE DTZ7.5B	
D529	8-719-400-18	DIODE MA152WK	
D530	8-719-400-18	DIODE MA152WK	

D531	8-719-988-62	DIODE 1SS355	
D532	8-719-988-62	DIODE 1SS355	
D533	8-719-988-62	DIODE 1SS355	

< TUNER UNIT >

FE1	1-693-045-11	TUNER UNIT (FM/AM)	
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< IC >

IC1	8-759-823-70	IC LA1060 (U660/U660RDS/U661RDS)	
IC2	8-759-823-81	IC LC7216M-TP-T1	
IC3	1-808-515-11	IC NMX3S900 (EXCEPT U550;US,CND)	
IC3	1-808-516-11	IC NMX3S920 (U550;US,CND)	
IC4	8-759-057-53	IC TDA7330D-013TR (U550RDS/U551RDS/U660RDS/U661RDS)	

IC5	8-759-823-84	IC LC7071NM-TP-T1 (U550RDS/U551RDS/U660RDS/U661RDS)	
IC121	8-759-909-71	IC BA4558F	
IC122	8-759-909-71	IC BA4558F	
IC123	8-759-909-71	IC BA4558F	

IC221	8-759-909-71	IC BA4558F	
IC222	8-759-909-71	IC BA4558F	
IC223	8-759-909-71	IC BA4558F	
IC311	8-752-055-10	IC CXA1332M	
IC321	8-759-820-15	IC LC7537AN	

IC322	8-759-909-71	IC BA4558F	
IC431	8-759-823-87	IC LB1638MTP-T1	
IC501	8-759-066-25	IC uPD75116GF-F41-3BE	
IC502	8-759-066-24	IC uPD75116GF-F40-3BE	
IC503	8-759-513-42	IC X24C04SI-C7000 (U550/U660)	

IC503	8-759-513-44	IC X24C16SI (U550RDS/U551RDS/U660RDS/U661RDS)	
IC504	8-759-940-45	IC S-8054HN-CB	
IC505	8-759-710-82	IC NJM2406F	

MAIN

Ref. No.	Part No.	Description	Remark
< JUMPER RESISTOR >			
JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W (U550/U550RDS/U551RDS)	
JR50	1-216-295-00	METAL CHIP 0 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)	
JR51	1-216-295-00	METAL CHIP 0 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)	
JR500	1-216-295-00	METAL CHIP 0 5% 1/10W (U550/U550RDS/U660RDS)	
JR501	1-216-295-00	METAL CHIP 0 5% 1/10W (EXCEPT U661RDS)	
JR502	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR503	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550)	
JR505	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR506	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR509	1-216-295-00	METAL GLAZE 0 5% 1/10W (U551RDS/U661RDS)	
JR510	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR511	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR512	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR513	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR514	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR520	1-216-295-00	METAL CHIP 0 5% 1/10W	
< COIL >			
L1	1-410-201-51	INDUCTOR CHIP 5.6uH (U660/U660RDS/U661RDS)	
L2	1-410-208-41	INDUCTOR CHIP 22uH	
L3	1-410-216-31	INDUCTOR CHIP 100uH (U660/U660RDS/U661RDS)	
L4	1-410-204-31	INDUCTOR CHIP 10uH	
L5	1-410-204-31	INDUCTOR CHIP 10uH (U550RDS/U551RDS/U660RDS/U661RDS)	
L6	1-410-204-31	INDUCTOR CHIP 10uH	
L501	1-410-204-31	INDUCTOR CHIP 10uH	
L502	1-410-204-31	INDUCTOR CHIP 10uH	
< TRANSISTOR >			
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (U660/U660RDS/U661RDS)	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (U660/U660RDS/U661RDS)	
Q6	8-729-901-01	TRANSISTOR DTC114EK (U660/U660RDS/U661RDS)	
Q7	8-729-901-01	TRANSISTOR DTC114EK	
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q9	8-729-901-04	TRANSISTOR DTA114EK	
Q10	8-729-809-71	TRANSISTOR 2SK536-TA	

Ref. No.	Part No.	Description	Remark
Q11	8-729-920-21	TRANSISTOR DTC314TKH04	
Q12	8-729-901-01	TRANSISTOR DTC114EK (U660/U660RDS/U661RDS)	
Q121	8-729-920-21	TRANSISTOR DTC314TKH04	
Q123	8-729-920-21	TRANSISTOR DTC314TKH04	
Q221	8-729-920-21	TRANSISTOR DTC314TKH04	
Q223	8-729-920-21	TRANSISTOR DTC314TKH04	
Q311	8-729-920-56	TRANSISTOR FMC1	
Q322	8-729-920-41	TRANSISTOR FMC3	
Q431	8-729-106-60	TRANSISTOR 2SB1115A	
Q432	8-729-900-53	TRANSISTOR DTC114EK	
Q433	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q434	8-729-920-41	TRANSISTOR FMC3	
Q435	8-729-901-01	TRANSISTOR DTC114EK	
Q501	8-729-216-22	TRANSISTOR 2SA1162	
Q502	8-729-216-22	TRANSISTOR 2SA1162	
Q503	8-729-903-10	TRANSISTOR FMW1	
Q504	8-729-907-26	TRANSISTOR IMX1	
Q505	8-729-903-10	TRANSISTOR FMW1	
Q506	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q507	8-729-216-22	TRANSISTOR 2SA1162	
Q508	8-729-216-22	TRANSISTOR 2SA1162	
Q509	8-729-216-22	TRANSISTOR 2SA1162	
Q510	8-729-216-22	TRANSISTOR 2SA1162	
Q511	8-729-901-01	TRANSISTOR DTC114EK	
Q512	8-729-920-41	TRANSISTOR FMC3	
Q513	8-729-920-41	TRANSISTOR FMC3	
Q514	8-729-904-63	TRANSISTOR DTB123YK	
Q515	8-729-904-63	TRANSISTOR DTB123YK	
Q516	8-729-904-63	TRANSISTOR DTB123YK	
Q517	8-729-904-63	TRANSISTOR DTB123YK (U550RDS/U551RDS/U660RDS/U661RDS)	
Q518	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q519	8-729-903-10	TRANSISTOR FMW1	
Q520	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q521	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q522	8-729-922-47	TRANSISTOR 2SB1184-TRR	
Q523	8-729-922-47	TRANSISTOR 2SB1184-TRR	
Q524	8-729-920-28	TRANSISTOR FMC9	
Q525	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q526	8-729-106-60	TRANSISTOR 2SB1115A	
Q527	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q528	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q530	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q531	8-729-106-60	TRANSISTOR 2SB1115A	
Q532	8-729-900-53	TRANSISTOR DTC114EK	
Q533	8-729-900-53	TRANSISTOR DTC114EK	

MAIN

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R1	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R2	1-216-073-00	METAL CHIP	10K 5% 1/10W (U660/U660RDS/U661RDS)
R3	1-216-089-00	METAL CHIP	47K 5% 1/10W (U660/U660RDS/U661RDS)
R4	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R5	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R6	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R7	1-216-095-00	METAL CHIP	82K 5% 1/10W (U660/U660RDS/U661RDS)
R8	1-216-049-00	METAL CHIP	1K 5% 1/10W (U660/U660RDS/U661RDS)
R9	1-216-748-11	METAL CHIP	39K 1% 1/10W (U660/U660RDS/U661RDS)
R10	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (U660/U660RDS/U661RDS)
R11	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R12	1-216-089-00	METAL CHIP	47K 5% 1/10W (U660/U660RDS/U661RDS)
R13	1-216-113-00	METAL CHIP	470K 5% 1/10W (U660/U660RDS/U661RDS)
R14	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (U660/U660RDS/U661RDS)
R15	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (U660/U660RDS/U661RDS)
R16	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (U660/U660RDS/U661RDS)
R17	1-216-073-00	METAL CHIP	10K 5% 1/10W
R19	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R20	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R21	1-216-073-00	METAL CHIP	10K 5% 1/10W
R22	1-216-198-00	METAL CHIP	1K 5% 1/8W
R23	1-216-190-00	METAL GLAZE	470 5% 1/8W
R24	1-216-045-00	METAL CHIP	680 5% 1/10W
R25	1-216-198-00	METAL CHIP	1K 5% 1/8W
R26	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R27	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R28	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R29	1-216-045-00	METAL CHIP	680 5% 1/10W
R30	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R31	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R33	1-216-049-00	METAL CHIP	1K 5% 1/10W
R35	1-216-049-00	METAL CHIP	1K 5% 1/10W
R38	1-216-077-00	METAL CHIP	15K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R39	1-216-295-00	METAL CHIP	0 5% 1/10W
R40	1-216-089-00	METAL CHIP	47K 5% 1/10W
R41	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R43	1-216-129-00	METAL CHIP	2.2M 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R44	1-216-097-00	METAL CHIP	100K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R45	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U550/U660)
R47	1-216-073-00	METAL CHIP	10K 5% 1/10W (U660/U660RDS/U661RDS)
R48	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R49	1-216-077-00	METAL CHIP	15K 5% 1/10W
R50	1-216-073-00	METAL CHIP	10K 5% 1/10W
R51	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R110	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
R111	1-216-684-11	METAL CHIP	24K 0.5% 1/10W
R112	1-216-645-11	METAL CHIP	560 0.5% 1/10W
R120	1-216-085-00	METAL CHIP	33K 5% 1/10W
R121	1-216-077-00	METAL CHIP	15K 5% 1/10W
R122	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W (U660RDS;G)
R122	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (EXCEPT U550;US,CND/U660RDS;G)
R122	1-216-073-00	METAL GLAZE	10K 5% 1/10W (U550;US,CND)
R123	1-216-077-00	METAL CHIP	15K 5% 1/10W
R124	1-216-081-00	METAL CHIP	22K 5% 1/10W
R125	1-216-121-00	METAL CHIP	1M 5% 1/10W
R126	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R127	1-216-077-00	METAL CHIP	15K 5% 1/10W
R128	1-216-121-00	METAL CHIP	1M 5% 1/10W
R129	1-216-073-00	METAL CHIP	10K 5% 1/10W
R130	1-216-121-00	METAL CHIP	1M 5% 1/10W
R131	1-216-077-00	METAL CHIP	15K 5% 1/10W
R132	1-216-081-00	METAL CHIP	22K 5% 1/10W
R133	1-216-075-00	METAL CHIP	12K 5% 1/10W (EXCEPT U550;US,CND)
R133	1-216-077-00	METAL GLAZE	15K 5% 1/10W (U550;US,CND)
R135	1-216-077-00	METAL CHIP	15K 5% 1/10W
R136	1-216-081-00	METAL CHIP	22K 5% 1/10W
R139	1-216-049-00	METAL CHIP	1K 5% 1/10W
R140	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R141	1-216-047-00	METAL CHIP	820 5% 1/10W
R142	1-216-097-00	METAL CHIP	100K 5% 1/10W
R210	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
R211	1-216-684-11	METAL CHIP	24K 0.5% 1/10W
R212	1-216-645-11	METAL CHIP	560 0.5% 1/10W
R220	1-216-085-00	METAL CHIP	33K 5% 1/10W
R221	1-216-077-00	METAL CHIP	15K 5% 1/10W
R222	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (EXCEPT U550;US,CND/U660RDS;G)

MAIN

Ref.No.	Part No.	Description	Remark			Ref.No.	Part No.	Description	Remark		
R222	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W (U660RDS;G)	R519	1-216-025-00	METAL CHIP	100	5%	1/10W
R222	1-216-073-00	METAL GLAZE	10K	5%	1/10W(U550;US,CND)	R520	1-216-089-00	METAL CHIP	47K	5%	1/10W
R223	1-216-077-00	METAL CHIP	15K	5%	1/10W	R521	1-216-089-00	METAL CHIP	47K	5%	1/10W
R224	1-216-081-00	METAL CHIP	22K	5%	1/10W	R522	1-216-089-00	METAL CHIP	47K	5%	1/10W
R225	1-216-121-00	METAL CHIP	1M	5%	1/10W	R523	1-216-025-00	METAL CHIP	100	5%	1/10W
R226	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R524	1-216-089-00	METAL CHIP	47K	5%	1/10W
R227	1-216-077-00	METAL CHIP	15K	5%	1/10W	R525	1-216-089-00	METAL CHIP	47K	5%	1/10W
R228	1-216-121-00	METAL CHIP	1M	5%	1/10W	R526	1-216-025-00	METAL CHIP	100	5%	1/10W
R229	1-216-073-00	METAL CHIP	10K	5%	1/10W	R527	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R230	1-216-121-00	METAL CHIP	1M	5%	1/10W	R528	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R231	1-216-077-00	METAL CHIP	15K	5%	1/10W	R529	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R232	1-216-081-00	METAL CHIP	22K	5%	1/10W	R530	1-216-081-00	METAL CHIP	22K	5%	1/10W
R233	1-216-075-00	METAL CHIP	12K	5%	1/10W	R531	1-216-073-00	METAL CHIP	10K	5%	1/10W
					(EXCEPT U550;US,CND)	R532	1-216-081-00	METAL CHIP	22K	5%	1/10W
R233	1-216-077-00	METAL GLAZE	15K	5%	1/10W(U550;US,CND)	R533	1-216-073-00	METAL CHIP	10K	5%	1/10W
R235	1-216-077-00	METAL CHIP	15K	5%	1/10W	R534	1-216-089-00	METAL CHIP	47K	5%	1/10W
R236	1-216-081-00	METAL CHIP	22K	5%	1/10W	R535	1-216-049-00	METAL CHIP	1K	5%	1/10W
R239	1-216-049-00	METAL CHIP	1K	5%	1/10W	R536	1-216-049-00	METAL CHIP	1K	5%	1/10W
R240	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	R537	1-216-081-00	METAL CHIP	22K	5%	1/10W
R241	1-216-047-00	METAL CHIP	820	5%	1/10W	R538	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R242	1-216-097-00	METAL CHIP	100K	5%	1/10W	R539	1-216-025-00	METAL CHIP	100	5%	1/10W
R310	1-216-049-00	METAL CHIP	1K	5%	1/10W	R540	1-216-089-00	METAL CHIP	47K	5%	1/10W
R311	1-216-685-11	METAL CHIP	27K	0.5%	1/10W	R541	1-216-089-00	METAL CHIP	47K	5%	1/10W
R312	1-216-073-00	METAL CHIP	10K	5%	1/10W	R542	1-216-049-00	METAL CHIP	1K	5%	1/10W
R313	1-216-073-00	METAL CHIP	10K	5%	1/10W	R543	1-216-037-00	METAL CHIP	330	5%	1/10W
R314	1-216-073-00	METAL CHIP	10K	5%	1/10W	R544	1-216-089-00	METAL CHIP	47K	5%	1/10W
R321	1-216-073-00	METAL CHIP	10K	5%	1/10W	R545	1-216-089-00	METAL CHIP	47K	5%	1/10W
R322	1-216-049-00	METAL CHIP	1K	5%	1/10W	R546	1-216-097-00	METAL CHIP	100K	5%	1/10W
R323	1-216-049-00	METAL CHIP	1K	5%	1/10W	R547	1-216-085-00	METAL CHIP	33K	5%	1/10W
R431	1-216-073-00	METAL CHIP	10K	5%	1/10W	R548	1-216-089-00	METAL CHIP	47K	5%	1/10W
R432	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R549	1-216-089-00	METAL CHIP	47K	5%	1/10W
R433	1-220-149-11	METAL GLAZE	2.2	10%	1/2W	R550	1-216-089-00	METAL CHIP	47K	5%	1/10W
R434	1-216-049-00	METAL CHIP	1K	5%	1/10W	R551	1-216-089-00	METAL CHIP	47K	5%	1/10W
R435	1-216-186-00	METAL GLAZE	330	5%	1/8W	R552	1-216-089-00	METAL CHIP	47K	5%	1/10W
R436	1-216-186-00	METAL GLAZE	330	5%	1/8W	R553	1-216-017-00	METAL CHIP	47	5%	1/10W
R501	1-216-097-00	METAL CHIP	100K	5%	1/10W	R554	1-216-073-00	METAL CHIP	10K	5%	1/10W
R502	1-216-097-00	METAL CHIP	100K	5%	1/10W	R555	1-216-089-00	METAL CHIP	47K	5%	1/10W
R503	1-216-097-00	METAL CHIP	100K	5%	1/10W	R556	1-216-091-00	METAL CHIP	56K	5%	1/10W
R504	1-216-097-00	METAL CHIP	100K	5%	1/10W	R557	1-216-089-00	METAL CHIP	47K	5%	1/10W
R505	1-216-089-00	METAL CHIP	47K	5%	1/10W	R558	1-216-097-00	METAL CHIP	100K	5%	1/10W
R506	1-216-097-00	METAL CHIP	100K	5%	1/10W	R559	1-216-097-00	METAL CHIP	100K	5%	1/10W
R507	1-216-097-00	METAL CHIP	100K	5%	1/10W	R560	1-216-049-00	METAL CHIP	1K	5%	1/10W
R508	1-216-097-00	METAL CHIP	100K	5%	1/10W	R561	1-220-150-11	METAL GLAZE	680	10%	1/2W
R509	1-216-097-00	METAL CHIP	100K	5%	1/10W	R562	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-097-00	METAL CHIP	100K	5%	1/10W	R563	1-220-150-11	METAL GLAZE	680	10%	1/2W
R511	1-216-097-00	METAL CHIP	100K	5%	1/10W	R564	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R512	1-216-097-00	METAL CHIP	100K	5%	1/10W	R565	1-216-041-00	METAL CHIP	470	5%	1/10W
R513	1-216-097-00	METAL CHIP	100K	5%	1/10W	R566	1-216-073-00	METAL CHIP	10K	5%	1/10W
R515	1-216-097-00	METAL CHIP	100K	5%	1/10W	R567	1-216-049-00	METAL CHIP	1K	5%	1/10W
R516	1-216-081-00	METAL CHIP	22K	5%	1/10W						

MAIN

PL

REEL

RESET

Ref. No.	Part No.	Description	Remark
R568	1-216-073-00	METAL CHIP	10K 5% 1/10W
R569	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R570	1-216-089-00	METAL CHIP	47K 5% 1/10W
R571	1-216-089-00	METAL CHIP	47K 5% 1/10W
R572	1-216-083-00	METAL CHIP	27K 5% 1/10W
R573	1-216-097-00	METAL CHIP	100K 5% 1/10W
R574	1-216-089-00	METAL CHIP	47K 5% 1/10W
R575	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R576	1-216-041-00	METAL CHIP	470 5% 1/10W
R577	1-216-041-00	METAL CHIP	470 5% 1/10W
R578	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U550;E/R551RDS/U660/U661RDS)
R579	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U551RDS/U661RDS)
R580	1-216-097-00	METAL CHIP	100K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R581	1-216-097-00	METAL CHIP	100K 5% 1/10W (EXCEPT U550;US,CND)
R582	1-216-097-00	METAL CHIP	100K 5% 1/10W
R583	1-216-073-00	METAL CHIP	10K 5% 1/10W
R584	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R585	1-216-073-00	METAL CHIP	10K 5% 1/10W
R586	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R588	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R589	1-216-089-00	METAL CHIP	47K 5% 1/10W
R590	1-216-089-00	METAL CHIP	47K 5% 1/10W
R591	1-216-097-00	METAL CHIP	100K 5% 1/10W
R592	1-216-097-00	METAL CHIP	100K 5% 1/10W
R593	1-216-073-00	METAL CHIP	10K 5% 1/10W
R594	1-216-295-00	METAL CHIP	0 5% 1/10W
R595	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R596	1-216-089-00	METAL CHIP	47K 5% 1/10W
R597	1-216-049-00	METAL CHIP	1K 5% 1/10W
R598	1-216-073-00	METAL CHIP	10K 5% 1/10W
R599	1-216-097-00	METAL CHIP	100K 5% 1/10W
R600	1-216-097-00	METAL CHIP	100K 5% 1/10W
R602	1-216-099-00	METAL CHIP	120K 5% 1/10W
< VARIABLE RESISTOR >			
RV2	1-238-600-11	RES, ADJ, CARBON 10K	
RV3	1-238-603-11	RES, ADJ, CARBON 100K	
RV4	1-238-604-11	RES, ADJ, CARBON 220K	
< SWITCH >			
S1	1-572-272-11	SWITCH, SLIDE (U660/U660RDS/U661RDS)	
S501	1-572-272-11	SWITCH, SLIDE	
S502	1-572-272-11	SWITCH, SLIDE (9K/10K) (U550;E/U660)	
< BUZZER >			
SP501	1-529-108-21	BUZZER, PIEZOELECTRIC	

Ref. No.	Part No.	Description	Remark
< VIBRATOR >			
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)	
X2	1-567-250-11	OSCILLATOR, CERAMIC	
X3	1-579-242-11	VIBRATOR, CRYSTAL (4.332MHz)	
X4	1-567-819-11	VIBRATOR, CERAMIC (4MHz)	(U550RDS/U551RDS/U660RDS/U661RDS)
X501	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)	
X502	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)	

*	1-642-880-11	PL BOARD	*****

*	1-642-879-11	REEL BOARD	*****
< CONNECTOR >			
CNP413	1-691-742-21	PIN, CONNECTOR (PC BOARD) 4P	
< DIODE >			
PH411	8-719-988-14	DIODE PR-11-B	
PH412	8-719-988-14	DIODE PR-11-B	
< TRANSISTOR >			
Q411	8-729-904-07	TRANSISTOR FMG2	
< RESISTOR >			
R411	1-216-845-11	METAL CHIP	100K 5% 1/16W
R412	1-216-845-11	METAL CHIP	100K 5% 1/16W
R413	1-216-190-00	METAL GLAZE	470 5% 1/8W

*	1-642-927-11	RESET BOARD	*****
< CONNECTOR >			
* CNP510	1-691-558-11	SOCKET, CONNECTOR 12P	
< SWITCH >			
S503	1-572-474-11	SWITCH, TACTIL	

SWITCH

Ref. No.	Part No.	Description	Remark
	1-692-037-11	SWITCH, KEY BOARD *****	
*	3-377-581-01	PLATE (LCD), LIGHT GUIDE	
*	3-377-597-01	SHEET (REFLECTOR)	
< CAPACITOR >			
C701	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C702	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C703	1-164-378-11	CERAMIC CHIP 30PF	5% 50V
C704	1-164-378-11	CERAMIC CHIP 30PF	5% 50V
C705	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C706	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C707	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C721	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C722	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C750	1-164-156-11	CERAMIC CHIP 0.1uF	25V
< CONNECTOR >			
CNP700	1-691-557-11	PIN, CONNECTOR 12P	
< DIODE >			
D700	8-719-404-46	DIODE MA110-TX	
D701	8-719-404-46	DIODE MA110-TX	
D702	8-719-404-46	DIODE MA110-TX	
D703	8-719-404-46	DIODE MA110-TX	
D704	8-719-404-46	DIODE MA110-TX	
D705	8-719-404-46	DIODE MA110-TX	
D706	8-719-404-46	DIODE MA110-TX	
D708	8-719-404-35	DIODE MA141WK	
D711	8-719-422-58	DIODE MA8062-TX	
D712	8-719-422-58	DIODE MA8062-TX	
D713	8-719-422-58	DIODE MA8062-TX	
D714	8-719-422-58	DIODE MA8062-TX	
D720	8-719-404-46	DIODE MA110-TX	
D721	8-719-422-43	DIODE MA8051-H-TX	
D722	8-719-987-45	DIODE CL-155Y/PG-CD	
D723	8-719-987-45	DIODE CL-155Y/PG-CD	
D724	8-719-987-45	DIODE CL-155Y/PG-CD	
D725	8-719-987-45	DIODE CL-155Y/PG-CD	
D726	8-719-987-45	DIODE CL-155Y/PG-CD	
D727	8-719-987-45	DIODE CL-155Y/PG-CD	
D728	8-719-987-45	DIODE CL-155Y/PG-CD	
D729	8-719-987-45	DIODE CL-155Y/PG-CD	
D730	8-719-987-45	DIODE CL-155Y/PG-CD	
D731	8-719-987-45	DIODE CL-155Y/PG-CD	
D732	8-719-987-45	DIODE CL-155Y/PG-CD	
D733	8-719-987-45	DIODE CL-155Y/PG-CD	
D734	8-719-987-45	DIODE CL-155Y/PG-CD	

Ref. No.	Part No.	Description	Remark
D735	8-719-987-45	DIODE CL-155Y/PG-CD	
D736	8-719-987-45	DIODE CL-155Y/PG-CD	
D737	8-719-987-45	DIODE CL-155Y/PG-CD	
D738	8-719-987-45	DIODE CL-155Y/PG-CD	
D739	8-719-987-45	DIODE CL-155Y/PG-CD	
D740	8-719-987-45	DIODE CL-155Y/PG-CD	
D741	8-719-987-45	DIODE CL-155Y/PG-CD	
D742	8-719-987-45	DIODE CL-155Y/PG-CD	
D743	8-719-987-45	DIODE CL-155Y/PG-CD	
D744	8-719-987-45	DIODE CL-155Y/PG-CD	
D745	8-719-987-45	DIODE CL-155Y/PG-CD	
D746	8-719-987-45	DIODE CL-155Y/PG-CD	
D747	8-719-987-45	DIODE CL-155Y/PG-CD	
D750	8-719-422-43	DIODE MA8051-H-TX	
< IC >			
IC701	8-759-066-23	IC uPD75008GB-676-3B4	
IC702	8-759-066-23	IC uPD75008GB-676-3B4	
IC721	8-759-246-16	IC TC9240F	
IC750	8-759-515-60	IC RS-20	
< JUMPER RESISTOR >			
JR701	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR702	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR703	1-216-295-00	METAL CHIP 0 5% 1/10W	
< COIL >			
L701	1-410-204-31	INDUCTOR CHIP 10uH	
< DISPLAY PANEL >			
LCD701	1-809-595-11	DISPLAY PANEL, LIQUID CRYSTAL	
< PILOT LAMP >			
PL721	1-518-646-11	LAMP, PILOT	
PL722	1-518-646-11	LAMP, PILOT	
PL723	1-518-648-11	LAMP, PILOT	
PL724	1-518-648-11	LAMP, PILOT	
< TRANSISTOR >			
Q701	8-729-402-13	TRANSISTOR XN1501-TX	
Q702	8-729-810-13	TRANSISTOR 2SA1677	
Q721	8-729-429-92	TRANSISTOR XN1211	
Q722	8-729-904-63	TRANSISTOR DTB123YK	
Q723	8-729-904-63	TRANSISTOR DTB123YK	
Q725	8-729-904-66	TRANSISTOR DTD113EK	
Q726	8-729-904-66	TRANSISTOR DTD113EK	
Q727	8-729-904-66	TRANSISTOR DTD113EK	
Q728	8-729-904-66	TRANSISTOR DTD113EK	

SWITCH

Ref. No.	Part No.	Description	Remark
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< RESISTOR >

R701	1-216-089-00	METAL CHIP	47K 5% 1/10W
R702	1-216-089-00	METAL CHIP	47K 5% 1/10W
R703	1-216-081-00	METAL CHIP	22K 5% 1/10W
R704	1-216-073-00	METAL CHIP	10K 5% 1/10W
R705	1-216-105-00	METAL CHIP	220K 5% 1/10W
R706	1-216-105-00	METAL CHIP	220K 5% 1/10W
R707	1-216-081-00	METAL CHIP	22K 5% 1/10W
R708	1-216-063-00	METAL CHIP	3.9K 5% 1/10W
R709	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R710	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R711	1-216-073-00	METAL CHIP	10K 5% 1/10W
R712	1-216-089-00	METAL CHIP	47K 5% 1/10W
R713	1-216-089-00	METAL CHIP	47K 5% 1/10W
R720	1-216-049-00	METAL CHIP	1K 5% 1/10W
R721	1-216-041-00	METAL CHIP	470 5% 1/10W
R722	1-216-097-00	METAL CHIP	100K 5% 1/10W
R723	1-216-089-00	METAL CHIP	47K 5% 1/10W
R724	1-216-049-00	METAL CHIP	1K 5% 1/10W
R725	1-216-049-00	METAL CHIP	1K 5% 1/10W
R726	1-216-049-00	METAL CHIP	1K 5% 1/10W
R727	1-216-035-00	METAL CHIP	270 5% 1/10W
R728	1-216-034-00	METAL CHIP	240 5% 1/10W
R729	1-216-035-00	METAL CHIP	270 5% 1/10W
R730	1-216-034-00	METAL CHIP	240 5% 1/10W
R731	1-216-033-00	METAL CHIP	220 5% 1/10W
R732	1-216-032-00	METAL CHIP	200 5% 1/10W
R733	1-216-033-00	METAL CHIP	220 5% 1/10W
R734	1-216-032-00	METAL CHIP	200 5% 1/10W
R735	1-216-033-00	METAL CHIP	220 5% 1/10W
R736	1-216-032-00	METAL CHIP	200 5% 1/10W
R737	1-216-027-00	METAL CHIP	120 5% 1/10W
R738	1-216-023-00	METAL CHIP	82 5% 1/10W
R739	1-216-027-00	METAL CHIP	120 5% 1/10W
R740	1-216-023-00	METAL CHIP	82 5% 1/10W
R741	1-216-033-00	METAL CHIP	220 5% 1/10W
R742	1-216-032-00	METAL CHIP	200 5% 1/10W
R750	1-216-025-00	METAL CHIP	100 5% 1/10W
R751	1-216-041-00	METAL CHIP	470 5% 1/10W

< SWITCH >

S700	1-692-037-41	SWITCH, KEY BOARD (SEL)
S701	1-692-037-41	SWITCH, KEY BOARD (-)
S710	1-692-037-41	SWITCH, KEY BOARD (MUTE)
S712	1-692-037-41	SWITCH, KEY BOARD (1/INTRO)
S713	1-692-037-41	SWITCH, KEY BOARD (2/REPEAT)
S720	1-692-037-41	SWITCH, KEY BOARD (+)
S721	1-692-037-41	SWITCH, KEY BOARD (SEEK -/AMS ◀)

Ref. No.	Part No.	Description	Remark
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S730	1-692-037-41	SWITCH, KEY BOARD (SENS/LOUD)
S731	1-692-037-41	SWITCH, KEY BOARD (SEEK +/AMS ▶)
S732	1-692-037-41	SWITCH, KEY BOARD (3/BANK)
S733	1-692-037-41	SWITCH, KEY BOARD (4/SHUF)
S740	1-692-037-41	SWITCH, KEY BOARD (OFF)
S741	1-692-037-41	SWITCH, KEY BOARD (DSPL)
S742	1-692-037-41	SWITCH, KEY BOARD (8/MTL)
S743	1-692-037-41	SWITCH, KEY BOARD (△)
S750	1-692-037-41	SWITCH, KEY BOARD (PRESET +/DISC FF)
S751	1-692-037-41	SWITCH, KEY BOARD (PRESET -/DISC REW)
S752	1-692-037-41	SWITCH, KEY BOARD (6/BL. SKIP)
S753	1-692-037-41	SWITCH, KEY BOARD (5/ATA)
S760	1-692-037-41	SWITCH, KEY BOARD (LIST)
S761	1-692-037-41	SWITCH, KEY BOARD (10)
S762	1-692-037-41	SWITCH, KEY BOARD (7/DOLBY)
S763	1-692-037-41	SWITCH, KEY BOARD (9)
S770	1-692-037-41	SWITCH, KEY BOARD (TAPE)
S771	1-692-037-41	SWITCH, KEY BOARD (CD)
S772	1-692-037-41	SWITCH, KEY BOARD (FM) (U550/U660)
S772	1-692-037-41	SWITCH, KEY BOARD (AF/TA) (U550RDS/U551RDS U660RDS/U661RDS)
S773	1-692-037-41	SWITCH, KEY BOARD (AM) (U550/U660)
S773	1-692-037-41	SWITCH, KEY BOARD (FM/AM) (U550RDS/U660RDS)
S773	1-692-037-41	SWITCH, KEY BOARD (FM/MW/LW) (U551RDS/U661RDS)

< VIBRATOR >

X701 1-577-273-11 OSCILLATOR, CERAMIC (4.19MHz)

MISCELLANEOUS

6	1-574-339-11	CORD (WITH CONNECTOR) (U550/U550RDS/U551RDS)
6	1-690-212-21	CORD (WITH CONNECTOR) (ANT)
6	1-690-944-11	CORD (WITH CONNECTOR) (ANT)
111	1-635-519-12	PC BOARD, FLEXIBLE
* 118	1-565-121-11	HOUSING, CONNECTOR 2P
* 210	1-563-470-11	HOUSING, CONNECTOR 2P
* CNJ303	1-563-470-11	HOUSING, CONNECTOR 2P
△F1	1-532-678-11	FUSE 12A
△F2	1-532-414-11	FUSE 1A
HP901	1-543-726-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N-31)
HP901	1-543-800-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N2-31)
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN
M902	X-3362-826-1	GEAR ASSY, MOTOR
PM901	1-454-461-11	SOLENOID, PLUNGER
S901	1-570-771-11	SWITCH

Note:
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SWITCH

Ref. No.	Part No.	Description	Remark
S902	1-572-397-11	SWITCH, ROTARY SLIDE	

		ACCESSORIES & PACKING MATERIALS	

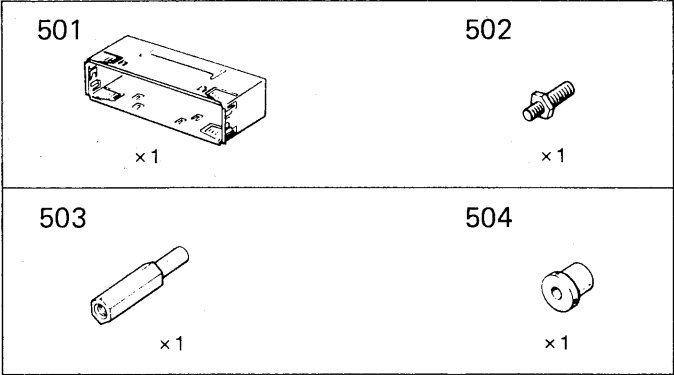
	X-3364-955-1	FRAME ASSY, FITING	
	X-3365-133-1	CASE ASSY	
	1-690-741-11	CORD (WITH CONNECTOR) (U550;US,CND)	
	1-690-742-11	CORD (WITH CONNECTOR) (EXCEPT U550;US,CND)	
	3-323-209-01	BOLT (4-5), STUD	
	3-323-210-01	ADJUSTOR, STUD BOLT	
	3-323-219-01	FRAME, FITTING (U660RDS;AEP)	
	3-336-617-01	BAG, PROTECTION	
	3-349-410-01	BUSHING	
*	3-355-207-01	CARDBOARD (E)	
	3-374-201-01	CASE	
	3-377-579-01	CATCHER, RAY, FILTER (U550;US/U660/ U660RDS;AEP/U661RDS)	
	3-377-579-11	CATCHER, RAY, FILTER (U550RDS/U551RDS)	
*	3-378-267-01	INDIVIDUAL CARTON (U660RDS)	
	3-378-552-01	FRAME (UPPER), FITTING (EXCEPT U550; CND/U660RDS)	
	3-378-553-01	FRAME (LOWER), FITTING (EXCEPT U550; CND/U660RDS)	
*	3-378-977-01	INDIVIDUAL CARTON (U550)	
*	3-378-974-01	INDIVIDUAL CARTON (U660)	
*	3-378-269-01	INDIVIDUAL CARTON (U661RDS)	
*	3-378-737-01	CUSHION (UPPER)	
*	3-378-738-01	CUSHION (LOWER)	
	3-378-976-01	PANEL (DISPLAY)	
	3-379-363-01	KEY	
	3-379-855-01	CUSHION (M)	
*	3-381-283-01	INDIVIDUAL CARTON (U550RDS)	
*	3-381-285-01	INDIVIDUAL CARTON (U551RDS)	
	3-754-823-11	MANUAL, INSTRUCTION (U550RDS/U551RDS) (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH)	
	3-754-823-21	MANUAL, INSTRUCTION (U550;US, CND) (ENGLISH, FRENCH)	
	3-754-823-41	MANUAL, INSTRUCTION (U550RDS) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-824-01	MANUAL, INSTRUCTION INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH) (U550RDS/U551RDS)	
	3-754-824-21	MANUAL, INSTRUCTION INSTALL (U550;US, CND) (ENGLISH, FRENCH)	
	3-754-824-41	MANUAL, INSTRUCTION INSTALL (U550RDS) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-861-11	MANUAL, INSTRUCTION INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH) (U660RDS/U661RDS)	

Ref. No.	Part No.	Description	Remark
	3-754-861-41	MANUAL, INSTRUCTION INSTALL (U660RDS;AEP) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-861-51	MANUAL, INSTRUCTION INSTALL (U550;E/U660) (ENGLISH, SPANISH, CHINESE)	
	3-754-863-11	MANUAL, INSTRUCTION (U660RDS/U661RDS) (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH)	
	3-754-863-41	MANUAL, INSTRUCTION (U660RDS;AEP) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-863-51	MANUAL, INSTRUCTION (U550;E/U660) (ENGLISH, SPANISH, CHINESE)	
	7-633-110-41	TAPE (50MMX500M)	

HARDWARE LIST

#1	7-621-255-25	SCREW +P 2X4
#2	7-621-772-10	SCREW +B 2X4
#3	7-624-101-01	STOP RING 1.2 (E TYPE)
#4	7-627-853-57	PRECISION SCREW +P 2X5 TYPE3
#5	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT
#6	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
#7	7-621-773-95	SCREW +PTT 2.6X6 (S)
#8	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
#9	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT
#10	7-621-770-67	SCREW(+PTT 2.6X8), GROUND POINT
#12	7-624-104-04	STOP RING 2.0, TYPE -E
#13	7-627-554-07	SCREW, PRECISION +P 2X2.2
#14	7-627-850-18	SCREW, PRECISION +P 1.4X2.5
#15	7-627-850-67	SCREW, PRECISION +P 1.4X4
#16	7-628-253-00	SCREW +PS 2X4
#17	7-624-102-04	STOP RING 1.5, TYPE -E
#18	7-621-255-65	SCREW +P 2X10

● MOUNTING HARDWARE



Ref.No.	Part No.	Description	Remark
501	X-3365-133-1	CASE ASSY	
502	3-323-209-01	BOLT (4-5), STUD	
503	3-323-210-01	ADJUSTOR, STUD BOLT	
504	3-349-410-01	BUSHING	

XR-U550/U550RDS/U551RDS XR-U660/U660RDS/U661RDS

SONY[®] SERVICE MANUAL

REVISED

SUPPLEMENT-1

File this Supplement with the Service Manual.

US Model
XR-U660

US Model
Canadian Model
XR-U550

AEP Model
XR-U550RDS/U551RDS
XR-U660RDS/U661RDS

UK Model
XR-U551RDS/U661RDS

E Model
XR-U550/U660

Subject :

1. A US Model has been added for XR-U660.

This model is the same as the XR-U550 (US Model) but with an added TV control function.
Otherwise, the XR-U660 (US Model) is almost identical to the XR-U550 (US Model).

Therefore, only the schematic diagram and printed wiring boards that have been changed,
and the parts that differ from those of the XR-U550 (US Model) are described in this manual.

~~2. CORRECTION~~

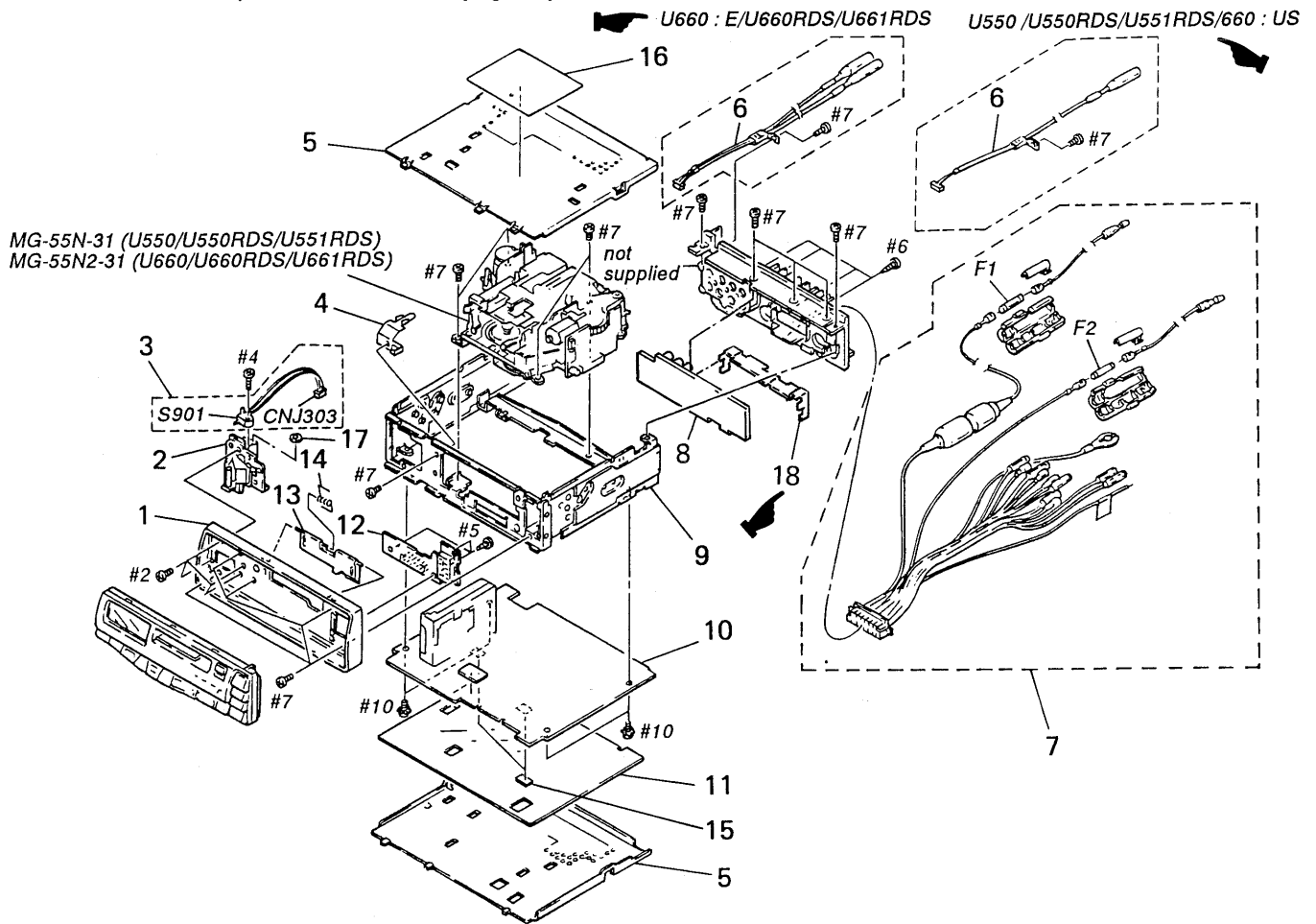
(Location E-G~4-8)

The schematic diagram illustrates the internal circuitry of a television, organized into several functional blocks:

- REM-BLOCK:** A detailed inset showing a remote control interface with components like R751 (470), R750 (5.1-K), and a 0.1F capacitor. It includes a section for U550 (L/CA) and U660 (US).
- POWER ON SW:** A section at the top center showing a power switch mechanism with transistors Q721, Q722, Q723 and resistors R726, R711, R712.
- U660-US:** A central section featuring the U660-US integrated circuit, which is the main microcontroller. It is connected to various peripheral components like Q701, Q702, Q703, Q704, Q705, Q706, Q707, Q708, Q709, Q710, Q711, Q712, Q713, Q714, Q715, Q716, Q717, Q718, Q719, Q720, Q721, Q722, Q723, Q724, Q725, Q726, Q727, Q728, Q729, Q730, Q731, Q732, Q733, Q734, Q735, Q736, Q737, Q738, Q739, Q740, Q741, Q742, Q743, Q744, Q745, Q746, Q747, Q748, Q749, Q750, Q751, Q752, Q753, Q754, Q755, Q756, Q757, Q758, Q759, Q760, Q761, Q762, Q763, Q764, Q765, Q766, Q767, Q768, Q769, Q770, Q771, Q772, Q773, Q774, Q775, Q776, Q777, Q778, Q779, Q780, Q781, Q782, Q783, Q784, Q785, Q786, Q787, Q788, Q789, Q790, Q791, Q792, Q793, Q794, Q795, Q796, Q797, Q798, Q799, Q800, Q801, Q802, Q803, Q804, Q805, Q806, Q807, Q808, Q809, Q810, Q811, Q812, Q813, Q814, Q815, Q816, Q817, Q818, Q819, Q820, Q821, Q822, Q823, Q824, Q825, Q826, Q827, Q828, Q829, Q830, Q831, Q832, Q833, Q834, Q835, Q836, Q837, Q838, Q839, Q840, Q841, Q842, Q843, Q844, Q845, Q846, Q847, Q848, Q849, Q850, Q851, Q852, Q853, Q854, Q855, Q856, Q857, Q858, Q859, Q860, Q861, Q862, Q863, Q864, Q865, Q866, Q867, Q868, Q869, Q870, Q871, Q872, Q873, Q874, Q875, Q876, Q877, Q878, Q879, Q880, Q881, Q882, Q883, Q884, Q885, Q886, Q887, Q888, Q889, Q890, Q891, Q892, Q893, Q894, Q895, Q896, Q897, Q898, Q899, Q900, Q901, Q902, Q903, Q904, Q905, Q906, Q907, Q908, Q909, Q910, Q911, Q912, Q913, Q914, Q915, Q916, Q917, Q918, Q919, Q920, Q921, Q922, Q923, Q924, Q925, Q926, Q927, Q928, Q929, Q930, Q931, Q932, Q933, Q934, Q935, Q936, Q937, Q938, Q939, Q940, Q941, Q942, Q943, Q944, Q945, Q946, Q947, Q948, Q949, Q950, Q951, Q952, Q953, Q954, Q955, Q956, Q957, Q958, Q959, Q960, Q961, Q962, Q963, Q964, Q965, Q966, Q967, Q968, Q969, Q970, Q971, Q972, Q973, Q974, Q975, Q976, Q977, Q978, Q979, Q980, Q981, Q982, Q983, Q984, Q985, Q986, Q987, Q988, Q989, Q990, Q991, Q992, Q993, Q994, Q995, Q996, Q997, Q998, Q999, Q1000, Q1001, Q1002, Q1003, Q1004, Q1005, Q1006, Q1007, Q1008, Q1009, Q1010, Q1011, Q1012, Q1013, Q1014, Q1015, Q1016, Q1017, Q1018, Q1019, Q1020, Q1021, Q1022, Q1023, Q1024, Q1025, Q1026, Q1027, Q1028, Q1029, Q1030, Q1031, Q1032, Q1033, Q1034, Q1035, Q1036, Q1037, Q1038, Q1039, Q1040, Q1041, Q1042, Q1043, Q1044, Q1045, Q1046, Q1047, Q1048, Q1049, Q1050, Q1051, Q1052, Q1053, Q1054, Q1055, Q1056, Q1057, Q1058, Q1059, Q1060, Q1061, Q1062, Q1063, Q1064, Q1065, Q1066, Q1067, Q1068, Q1069, Q1070, Q1071, Q1072, Q1073, Q1074, Q1075, Q1076, Q1077, Q1078, Q1079, Q1080, Q1081, Q1082, Q1083, Q1084, Q1085, Q1086, Q1087, Q1088, Q1089, Q1090, Q1091, Q1092, Q1093, Q1094, Q1095, Q1096, Q1097, Q1098, Q1099, Q1100, Q1101, Q1102, Q1103, Q1104, Q1105, Q1106, Q1107, Q1108, Q1109, Q1110, Q1111, Q1112, Q1113, Q1114, Q1115, Q1116, Q1117, Q1118, Q1119, Q1120, Q1121, Q1122, Q1123, Q1124, Q1125, Q1126, Q1127, Q1128, Q1129, Q1130, Q1131, Q1132, Q1133, Q1134, Q1135, Q1136, Q1137, Q1138, Q1139, Q1140, Q1141, Q1142, Q1143, Q1144, Q1145, Q1146, Q1147, Q1148, Q1149, Q1150, Q1151, Q1152, Q1153, Q1154, Q1155, Q1156, Q1157, Q1158, Q1159, Q1160, Q1161, Q1162, Q1163, Q1164, Q1165, Q1166, Q1167, Q1168, Q1169, Q1170, Q1171, Q1172, Q1173, Q1174, Q1175, Q1176, Q1177, Q1178, Q1179, Q1180, Q1181, Q1182, Q1183, Q1184, Q1185, Q1186, Q1187, Q1188, Q1189, Q1190, Q1191, Q1192, Q1193, Q1194, Q1195, Q1196, Q1197, Q1198, Q1199, Q1200, Q1201, Q1202, Q1203, Q1204, Q1205, Q1206, Q1207, Q1208, Q1209, Q1210, Q1211, Q1212, Q1213, Q1214, Q1215, Q1216, Q1217, Q1218, Q1219, Q1220, Q1221, Q1222, Q1223, Q1224, Q1225, Q1226, Q1227, Q1228, Q1229, Q1230, Q1231, Q1232, Q1233, Q1234, Q1235, Q1236, Q1237, Q1238, Q1239, Q1240, Q1241, Q1242, Q1243, Q1244, Q1245, Q1246, Q1247, Q1248, Q1249, Q1250, Q1251, Q1252, Q1253, Q1254, Q1255, Q1256, Q1257, Q1258, Q1259, Q1260, Q1261, Q1262, Q1263, Q1264, Q1265, Q1266, Q1267, Q1268, Q1269, Q1270, Q1271, Q1272, Q1273, Q1274, Q1275, Q1276, Q1277, Q1278, Q1279, Q1280, Q1281, Q1282, Q1283, Q1284, Q1285, Q1286, Q1287, Q1288, Q1289, Q1290, Q1291, Q1292, Q1293, Q1294, Q1295, Q1296, Q1297, Q1298, Q1299, Q1300, Q1301, Q1302, Q1303, Q1304, Q1305, Q1306, Q1307, Q1308, Q1309, Q1310, Q1311, Q1312, Q1313, Q1314, Q1315, Q1316, Q1317, Q1318, Q1319, Q1320, Q1321, Q1322, Q1323, Q1324, Q1325, Q1326, Q1327, Q1328, Q1329, Q1330, Q1331, Q1332, Q1333, Q1334, Q1335, Q1336, Q1337, Q1338, Q1339, Q1340, Q1341, Q1342, Q1343, Q1344, Q1345, Q1346, Q1347, Q1348, Q1349, Q1350, Q1351, Q1352, Q1353, Q1354, Q1355, Q1356, Q1357, Q1358, Q1359, Q1360, Q1361, Q1362, Q1363, Q1364, Q1365, Q1366, Q1367, Q1368, Q1369, Q1370, Q1371, Q1372, Q1373, Q1374, Q1375, Q

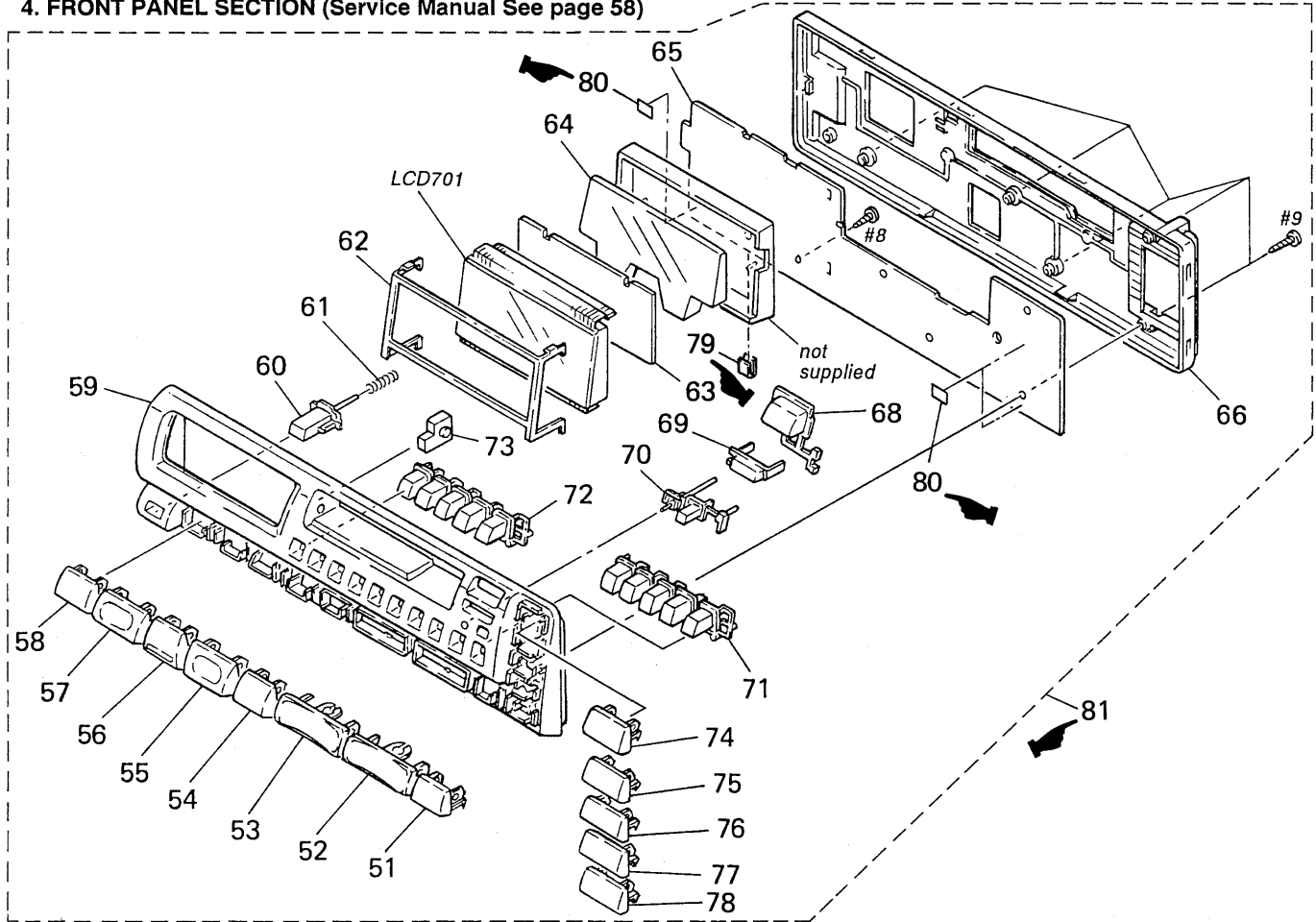
(Location A-F~6-9)

3. GENERAL SECTION (Service Manual See page 57)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	3-377-586-01	PANEL, SUB (EXCEPT U550/U660:US)		* 11	3-377-593-01	INSULATOR (EXCEPT U660:US)	
* 1	3-377-595-01	PANEL, SUB (U550/U660:US)		* 11	3-388-283-01	INSULATOR (U660:US)	
2	X-3365-507-2	LOCK ASSY		* 12	1-642-927-11	RESET BOARD	
3	X-3365-035-1	SWITCH ASSY		13	3-377-598-01	DOOR, CASSETTE (U550)	
4	3-381-198-01	PLATE, LOCK		13	3-377-598-11	DOOR, CASSETTE (U660RDS)	
* 5	3-377-591-01	COVER		13	3-377-598-21	DOOR, CASSETTE (U661RDS)	
6	1-574-339-11	CORD (WITH CONNECTOR) (U550/U550RDS/U551RDS/U660:US)		13	3-377-598-31	DOOR, CASSETTE (U551RDS)	
6	1-690-944-11	CORD (WITH CONNECTOR) (ANT) (U660:E/U660RDS/U661RDS)		13	3-377-598-41	DOOR, CASSETTE (U550RDS)	
7	1-690-741-11	CORD (WITH CONNECTOR) (U550/U660:US)		13	3-377-598-51	DOOR, CASSETTE (U660:E)	
7	1-690-742-11	CORD (WITH CONNECTOR) (EXCEPT U550/U660:US)		13	3-377-598-61	DOOR, CASSETTE (U660:US)	
* 8	A-3273-841-A	AMPLIFIER BOARD, COMPLETE (U660RDS/U661RDS)		14	3-377-892-01	SPRING (C DOOR), TORSION COIL	
* 8	A-3295-042-A	AMPLIFIER BOARD, COMPLETE (U550, U660)		15	9-911-841-XX	CUSHION, CASSETTE LID	
* 8	A-3295-075-A	AMPLIFIER BOARD, COMPLETE (U550RDS/U551RDS)		* 16	3-377-819-01	LABEL, MODEL NUMBER (U661RDS)	
9	X-3364-781-1	CHASSIS ASSY		* 16	3-377-820-02	LABEL, MODEL NUMBER (U660RDS:AEP)	
* 10	A-3273-832-A	MAIN BOARD, COMPLETE (U660RDS:AEP)		* 16	3-377-821-01	LABEL, MODEL NUMBER (U660RDS)	
* 10	A-3273-833-A	MAIN BOARD, COMPLETE (U660RDS:G)		* 16	3-377-822-01	LABEL, MODEL NUMBER (U550)	
* 10	A-3273-834-A	MAIN BOARD, COMPLETE (U661RDS)		* 16	3-378-739-01	LABEL, MODEL NUMBER (U660:E)	
* 10	A-3273-835-A	MAIN BOARD, COMPLETE (U660:E)		* 16	3-378-740-01	LABEL, MODEL NUMBER (U551RDS)	
* 10	A-3273-883-A	MAIN BOARD, COMPLETE (U550/U660:US)		* 16	3-378-741-01	LABEL, MODEL NUMBER (U550RDS)	
* 10	A-3295-076-A	MAIN BOARD, COMPLETE (U550RDS:AEP)		* 16	3-387-915-01	LABEL, MODEL NUMBER (U660:US)	
* 10	A-3295-080-A	MAIN BOARD, COMPLETE (U551RDS)		17	3-701-436-11	WASHER, STOPPER	
* 10	A-3295-082-A	MAIN BOARD, COMPLETE (U550RDS:G)		* 18	3-377-590-01	BRACKET (IC)	
				CNJ303	1-563-470-11	HOUSING, CONNECTOR 2P	
				△F1	1-532-678-11	FUSE 12A	
				△F2	1-532-414-11	FUSE 1A	
				S901	3-570-771-11	SWITCH	

4. FRONT PANEL SECTION (Service Manual See page 58)



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
51	3-377-564-01	BUTTON (LIST)		65	A-3222-562-A	KEY BOARD COMPLETE (U660:US)	
52	3-377-571-01	BUTTON (DISC)		* 66	3-377-585-01	PANEL, FRONT BACK	
53	3-377-572-01	BUTTON (SEEK)		68	3-377-560-02	BUTTON (EJECT)	
54	3-377-567-01	BUTTON (LOUD)		69	3-377-579-01	CATCHER, RAY, FILTER	(EXCEPT U550RDS, U551RDS)
55	3-377-570-01	BUTTON (+)		69	3-381-491-01	COVER (FILTER) (U550RDS, U551RDS)	
56	3-377-568-01	BUTTON (SELECT)		70	3-377-582-01	BUTTON (RESET)	
57	3-377-569-01	BUTTON (-)		71	3-377-575-01	BUTTON (PRESET 6-10)	
58	3-377-573-01	BUTTON (MUTE)		72	3-377-574-01	BUTTON (PRESET 1-5)	
59	X-3364-820-1	PANEL SUB ASSY, FRONT (U660RDS)	(51-53, 74-78)	73	3-377-588-01	PLATE (C DOOR), LIGHT GUIDE	
59	X-3364-821-3	PANEL SUB ASSY, FRONT (U661RDS)	(51-53, 74-78)	74	3-377-561-11	BUTTON (AF/TA)	(U550RDS/U551RDS/U660RDS/U661RDS)
59	X-3364-825-3	PANEL SUB ASSY, FRONT (U550)	(51-53, 74-78)	74	3-377-561-01	BUTTON (AF/TA) (U660:US)	
59	X-3364-870-1	PANEL SUB ASSY, FRONT (U550RDS)	(51-53, 74-78)	74	3-377-561-21	BUTTON (FM) (U550/U660:E)	
59	X-3364-871-1	PANEL SUB ASSY, FRONT (U551RDS)	(51-53, 74-78)	75	3-377-563-01	BUTTON (FM/AM) (U550RDS/U660RDS/U660:US)	
59	X-3364-872-3	PANEL SUB ASSY, FRONT (U660:E)	(51-53, 74-78)	75	3-377-563-11	BUTTON (FM/AM) (U551RDS/U661RDS)	
59	X-3366-561-1	PANEL SUB ASSY, FRONT (U660:US)	(51-53, 74-78)	75	3-377-563-21	BUTTON (AM) (U550/U660:E)	
60	3-377-577-01	BUTTON (RELEASE)		76	3-377-566-01	BUTTON (TAPE)	
61	3-375-373-01	SPRING (RELEASE)		77	3-377-565-01	BUTTON (CD)	
* 62	3-377-576-01	COVER (LCD)		78	3-377-562-01	BUTTON (OFF)	
* 63	3-377-597-01	SHEET (REFLECTOR)		79	9-911-837-XX	DAMPER	
* 64	3-377-581-01	PLATE (LCD), LIGHT GUIDE		80	4-918-544-11	SPACER (T)	
* 65	A-3222-383-A	PC BOARD ASSY, KEY (U660RDS/U661RDS)		81	A-3252-337-A	PANEL ASSY, FRONT (U660:E)	(51-80, LCD701, #8,9)
* 65	A-3222-394-A	KEY BOARD COMPLETE (U550/U660:E)		81	A-3252-358-A	PANEL ASSY, FRONT (U550)	(51-80, LCD701, #8,9)
* 65	A-3222-446-A	KEY BOARD COMPLETE (U550RDS/U551RDS)		81	A-3252-661-A	PANEL ASSY, FRONT (U660:US)	(51-80, LCD701, #8,9)
				LCD701	1-809-595-11	DISPLAY PANEL, LIQUID CRYSTAL	

5. ELECTRICAL PARTS LIST (Service Manual Page 62 – 74)

Ref. No.	Former Parts Description (Parts No.)	Parts No.	New Parts Description	Remark
(Page 62)	* A-3273-841-A (EXCEPT U550RDS/ U551RDS)	* A-3273-841-A	AMPLIFIER BOARD, COMPLETE (U660RDS/U661RDS) *****	Correct
		* A-3295-042-A	AMPLIFIER BOARD, COMPLETE (U550/U660) *****	Added
C901 (Page 62)	_____	1-128-113-11	ELECT 3.3MF 20 % 50V	Added
C902 (Page 62)	_____	1-128-113-11	ELECT 3.3MF 20 % 50V	Added
C918 (Page 62)	1-162-282-31	1-163-117-00	CAP, CERAMIC 100PF 5 % 50V (U660RDS/U661RDS)	Correct
(Page 64)	* A-3273-835-A (U660)	* A-3273-835-A	MAIN BOARD, COMPLETE (U660 : E) *****	Correct
	* A-3273-883-A (U550)	* A-3273-883-A	MAIN BOARD, COMPLETE (U550/U660) *****	Correct
	* A-3295-076-A (U550RDS)	* A-3273-076-A	MAIN BOARD, COMPLETE (U550RDS : AEP) *****	Correct
		* A-3295-082-A	MAIN BOARD, COMPLETE (U550RDS : G) *****	Added
CNP1 (Page 66)	1-506-986-11	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P (U550/U550RDS/U551RDS/U660 : US)	Added
		1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P (U660 : E/U660RDS/U661RDS)	Correct
FE1 (Page 66)	1-695-045-11	1-693-045-11	TUNER UNIT (FM/AM) (EXCEPT U551RDS/U661RDS)	Correct
		1-693-046-11	TUNER UNIT (FM/MW/LW) (U551RDS/U661RDS)	Added
IC3 (Page 66)	1-808-515-11	1-808-515-11	IC NMX3S900 (EXCEPT U550/U660 : US)	Correct
		1-808-516-11	IC NMX3S920 (U550/U660 : US)	Added
L6 (Page 67)	1-410-204-31	1-410-204-31	INDUCTOR CHIP 10 μ H (U550RDS/U551RDS/U660RDS/U661RDS)	Correct
X3 (Page 70)	1-579-242-11 (4.332 MHz)	1-579-242-11	VIBRATOR, CRYSTAL (4.332 MHz) (EXCEPT U550/U660)	Correct
S503 (Page 70)	1-572-474-11 SWITCH, TACTIL	1-571-938-11	SWITCH KEY BOARD	Changed

Ref. No.	Former Parts Description (Parts No.)	Parts No.	New Parts Description				Remark
(Page 71)	1-692-037-11 SWITCH, KEY BOARD	* A-3222-383-A	KEY BOARD, COMPLETE (U660RDS/U661RDS) *****				Added
		* A-3222-394-A	KEY BOARD, COMPLETE (U550/U660 : E) *****				Added
		* A-3222-446-A	KEY BOARD, COMPLETE (U550RDS/U551RDS) *****				Added
		* A-3222-562-A	KEY BOARD, COMPLETE (U660 : US) *****				Added
IC702 (Page 71)	8-759-066-23 IC μ PD75008GB-676-3B4	8-759-509-91	IC XRA10393F				Correct
JR705 (Page 71)	1-216-295-00	1-216-295-00	METAL CHIP	0	5 %	1/10 W	Correct
			(U550/U660 : E)				
JR702 (Page 71)	1-216-295-00	1-216-295-00	METAL CHIP	0	5 %	1/10 W	Correct
			(EXCEPT U550/U660 : E)				
JR703 (Page 71)	1-216-295-00	1-216-295-00	METAL CHIP	0	5 %	1/10 W	Correct
			(EXCEPT U550/U660 : E)				
JR704 (Page 71)	1-216-295-00	1-216-295-00	METAL CHIP	0	5 %	1/10 W	Added
			(U550/U660 : E)				
R714 (Page 71)	_____	1-216-295-00	METAL CHIP	0	5 %	1/10 W	Added
			(U660 : US)				
R713 (Page 72)	1-216-089-00	1-216-089-00	METAL CHIP	47K	5 %	1/10 W	Correct
			(EXCEPT U660 : US)				
6 (Page 72)	1-574-339-11	1-574-339-11	CORD (WITH CONNECTOR) (ANT) (U550/U550RDS/U551RDS/U660 : US)				Correct
	1-690-212-21	_____					Deleted
	1-690-944-11	1-690-944-11	CORD (WITH CONNECTOR) (ANT) (U660 : E/U660RDS/U661RDS)				Correct
ACC (Page 73)	X-3364-955-1	X-3364-955-1	FRAME ASSY, FITING (EXCEPT U660RDS : AEP)				Correct
	3-377-579-01	3-377-579-01	CATCHER, RAY, FILTER (EXCEPT U550RDS/U551RDS)				Correct
	3-378-552-01 FRAM (UPPER), FITTING (EXCEPT U550 : CND/U660RDS)	_____					Deleted
	3-378-553-01 FRAM (LOWER), FITTING (EXCEPT U550 : CND/U660RDS)	_____					Deleted

Ref. No.	Former Parts Description (Parts No.)	New Parts		Remark
		Parts No.	Description	
ACC (Page 73)	3-378-974-01 (U660)	3-378-974-01	INDIVIDUAL CARTON (U660 : E)	Correct
		3-387-936-01	INDIVIDUAL CARTON (U660 : US)	Added
	3-754-863-51 (U550 : E/U660)	3-754-863-51	MANUAL, INSTRUCTION (U550 : E/U660 : E)	Correct
		3-756-600-21	MANUAL, INSTRUCTION (U660 : US) (ENGLISH, FRENCH)	Added
	3-754-861-51 (U550 : E/U660)	3-754-861-51	MANUAL, INSTRUCTION (U550 : E/U660 : E)	Correct
		3-756-601-21	MANUAL, INSTRUCTION, INSTALL (U660 : US) (ENGLISH, FRENCH)	Added
	7-633-110-41 TAPE (50MM × 500M)			Deleted

